Title: CRs (R'99 and Rel-4/Rel-5 category A) to TS 25.331. (4)

Source: TSG-RAN WG2

Agenda item: 7.2.3

Doc-1st-	Status-	Spec	CR	Rev	Phase	Subject	Cat	Version	Version
R2-023112	Agreed	25.331	1752	-	R'99	DPCH compressed mode info in Downlink information common for all RLs	F	3.12.0	3.13.0
R2-023113	Agreed	25.331	1753	-	Rel-4	PCH compressed mode info in Downlink information common for all RLs		4.7.0	4.8.0
R2-023114	Agreed	25.331	1754	-	Rel-5	DPCH compressed mode info in Downlink information common for all RLs	А	5.2.0	5.3.0
R2-023255	Agreed	25.331	1755	1	R'99	Handling of RB mapping	F	3.12.0	3.13.0
R2-023256	Agreed	25.331	1756	1	Rel-4	Handling of RB mapping	Α	4.7.0	4.8.0
R2-023257	Agreed	25.331	1757	1	Rel-5	Handling of RB mapping	Α	5.2.0	5.3.0
R2-023129	Agreed	25.331	1764	-	R'99	RLC window size in default configurations	F	3.12.0	3.13.0
R2-023130	Agreed	25.331	1765	-	Rel-4	RLC window size in default configurations	Α	4.7.0	4.8.0
R2-023131	Agreed	25.331	1766	-	Rel-5	RLC window size in default configurations		5.2.0	5.3.0
R2-023132	Agreed	25.331	1767	-	R'99	Corrections to Activation time	F	3.12.0	3.13.0
R2-023133	Agreed	25.331	1768	-	Rel-4	Corrections to Activation time	Α	4.7.0	4.8.0
R2-023134	Agreed	25.331	1769	-	Rel-5	Corrections to Activation time	Α	5.2.0	5.3.0
R2-023135	Agreed	25.331	1770	-	R'99	Numbering of "ASC Setting" IEs included in "PRACH partitioning" IE	F	3.12.0	3.13.0
R2-023136	Agreed	25.331	1771	-	Rel-4	Numbering of "ASC Setting" IEs included in "PRACH partitioning" IE	A	4.7.0	4.8.0
R2-023137	Agreed	25.331	1772	-	Rel-5	Numbering of "ASC Setting" IEs included in "PRACH partitioning" IE	A	5.2.0	5.3.0

R2-023280	Agreed	25.331	1777	3	R'99	Correction on support for compressed mode	F	3.12.0	3.13.0
R2-023251	Agreed	25.331	1778	2	Rel-4	Correction on support for compressed mode	А	4.7.0	4.8.0
R2-023252	Agreed	25.331	1779	2	Rel-5	Correction on support for compressed mode	Α	5.2.0	5.3.0

TSG-RAN Working Group 2 meeting #33 Sophia-Antipolis, France 12th – 15rd November 2002

R2-023112

	(CHANG	GE REQI	UEST	CR-Form-v
*	25.331 CR	1752	жrev	ж	Current version: 3.12.0 **

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the **%** symbols.

Proposed change affects:	UICC apps#	ME X Radio Access Network X Core Network	
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Title:	Ж	DPCH compressed mode info in Downlink inform	ation commo	n for all RLs
Source:	ж	Ericsson		
Work item code	:#	TEI	Date: ♯	October 2002
Category:	ж	F	Release: ₩	R99
		Use <u>one</u> of the following categories:	Use <u>one</u> of	the following releases:
		F (correction)	2	(GSM Phase 2)
		A (corresponds to a correction in an earlier releas	e) R96	(Release 1996)
		B (addition of feature),	R97	(Release 1997)
		C (functional modification of feature)	R98	(Release 1998)
		D (editorial modification)	R99	(Release 1999)
		Detailed explanations of the above categories can	Rel-4	(Release 4)
		be found in 3GPP TR 21.900.	Rel-5	(Release 5)
			Rel-6	(Release 6)

Reason for change:

Currently, the specification contains ambiguous statements regarding what the UE shall do when the IE "DPCH compressed mode info" is not included in the IE "Downlink information common for all radio links".

Summary of change: It is proposed to:

- remove the ambiguous semantics in 10.3.6.24;
- make the inclusion of the IE "DPCH compressed mode info" OP;
- clarify that the text in 8.6.6.15 is also applicable in the case the IE "DPCH compressed mode info" is not received;

T1 impact:

No impact on T1 specifications is foreseen.

Impact analysis:

Impacted functionality: Compressed mode activation

A UE not implementing this CR and having assumed the incorrect behaviour will restart CM patterns erroneously when the IE "DPCH compressed mode info" is not included in the IE "Downlink information common for all radio links".

A UTRAN not implementing this CR and having assumed the incorrect behaviour will assume CM pattern restarts erroneously when the IE "DPCH compressed mode info" is not included in the IE "Downlink information common for all radio links".

Clarification of a function where the specification is ambigous. Does not affect

	implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise
Consequences if # not approved:	If this CR is not approved, in cases where a UTRAN and UE have a different assumption regarding the CM restart, degraded handover performance and dropped calls may be the result.

Clauses affected:	8.6.6.15 ; 10.3.6.24
Other specs Affected:	Y N X Other core specifications X Test specifications O&M Specifications
Other comments:	x

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked \(\mathcal{H} \) contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.6 Generic actions on receipt and absence of an information element

// partly skipped //

8.6.6.15 DPCH Compressed mode info

If the IE "DPCH compressed mode info" is included, and if the IE group "transmission gap pattern sequence configuration parameters" is included, the UE shall for each transmission gap pattern sequence perform the following consistency checks:

- 1> if UE, according to its measurement capabilities, and for the measurement purpose indicated by IE "TGMP", requires UL compressed mode for measurements on any of the cells to be measured according to UE variable CELL_INFO_LIST, and CHOICE 'UL/DL mode' indicates 'DL only':
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if UE, according to its measurement capabilities, and for the measurement purpose indicated by IE "TGMP", requires DL compressed mode for measurements on any of the cells to be measured according to UE variable CELL_INFO_LIST, and CHOICE 'UL/DL mode' indicates 'UL only':
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if UE already has an active transmission gap pattern sequence that, according to IE "TGMP", has the same measurement purpose, and both patterns will be active after the new configuration has been taken into use:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.

If variable INVALID_CONFIGURATION has value FALSE after UE has performed the checks above, the UE shall:

- 1> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag") in the variable TGPS_IDENTITY):
 - 2> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time" (see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
 - 2> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time" (see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- 1> update each pattern sequence to the variable TGPS_IDENTITY according to the IE "TGPSI";
- 1> update into the variable TGPS_IDENTITY the configuration information defined by IE group" transmission gap pattern sequence configuration parameters ";
- 1> after the new configuration has been taken into use:
 - 2> activate the stored pattern sequence corresponding to each IE "TGPSI" for which the "Current TGPS status flag" in the variable TGPS_IDENTITY is set to "active" at the time indicated by IE "TGCFN"; and
 - 2> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 2> if the new configuration is taken into use at the same CFN as indicated by IE "TGCFN":
 - 3> start the concerned pattern sequence immediately at that CFN.

1> monitor if the parallel transmission gap pattern sequences create an illegal overlap, and in case of overlap, take actions as specified in subclause 8.2.11.2.

If the IE "DPCH compressed mode info" is included, and if the IE group "transmission gap pattern sequence configuration parameters" is not included, the UE shall:

- 1> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag" in the variable TGPS_IDENTITY):
 - 2> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use:
 - 3> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS_IDENTITY to "inactive".
 - 2> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time" (see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- 1> after the new configuration has been taken into use:
 - 2> activate, at the time indicated by IE "TGCFN", the stored pattern sequence corresponding to each IE "TGPSI" for which the "TGPS status flag" is set to "activate"; and
 - 2> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 2> if the new configuration is taken into use at the same CFN as indicated by IE "TGCFN":
 - 3> start the concerned pattern sequence immediately at that CFN.

For transmission gap pattern sequences stored in variable TGPS_IDENTITY, but not identified in IE "TGPSI" <u>(either due to absence of the IE "DPCH compressed mode info" in the received message or due to not receiving the concerning TGPSI value in the IE "DPCH compressed mode info")</u>, the UE shall:

- 1> if the received message implies a timing re-initialised hard handover (see subclause 8.3.5.1):
 - 2> deactivate such transmission gap pattern sequences at the beginning of the frame, indicated by IE "Activation time" (see subclause 8.6.3.1) received in this message; and
 - 2> set IE "Current TGPS Status Flag" in corresponding UE variable TGPS IDENTITY to 'inactive'.
- 1> if the received message not implies a timing re-initialised hard handover (see subclause 8.3.5.1):
 - 2> continue such transmission gap pattern sequence according to IE "Current TGPS Status Flag" in the corresponding UE variable TGPS_IDENTITY.

Uplink and downlink compressed mode methods are described in [27]. For UL "higher layer scheduling" compressed mode method and transport format combination selection, see [15].

10.3.6.24 Downlink information common for all radio links

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Downlink DPCH info common	OP		Downlink	
for all RL			DPCH info	
			common for	
			all RL	
			10.3.6.18	
CHOICE mode	MP			
>FDD				
>>DPCH compressed mode info	MDOP		DPCH	Default value is the existing
			compressed	value of DPCH compressed
			mode info	mode information
			10.3.6.33	
>>TX Diversity Mode	MD		TX Diversity	Default value is the existing
			Mode	value of TX Diversity mode
			10.3.6.86	
>>SSDT information	OP		SSDT	
			information	
			10.3.6.77	
>TDD				(no data)
Default DPCH Offset Value	OP		Default	
			DPCH Offset	
			Value,	
			10.3.6.16	

TSG-RAN Working Group 2 meeting #33 Sophia-Antipolis, France 12th – 15rd November 2002

R2-023113

	(CHANG	E REQ	UES	Γ		CR-Form-v7
*	25.331 CR	1753	⊭ rev	ж	Current version:	4.7.0	*

For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the **x** symbols.

Proposed change affects: UICC apps# ME X Radio Access Network X Core Network

Title:	Ж	DPCH compressed mode info in Downlink informa	tion commo	n for all RLs
Source:	Ж	Ericsson		
Work item code	. ae	TEI	Doto: 9	October 2002
Work item code		ICI	Date. #	October 2002
Category:	\mathfrak{R}	A	Release: ₩	
		Use <u>one</u> of the following categories:	Use <u>one</u> of	the following releases:
		F (correction)	2	(GSM Phase 2)
		A (corresponds to a correction in an earlier release)	R96	(Release 1996)
		B (addition of feature),		(Release 1997)
		C (functional modification of feature)		(Release 1998)
		(editorial modification)	R99	(Release 1999)
		Detailed explanations of the above categories can	Rel-4	(Release 4)
		be found in 3GPP TR 21.900.	Rel-5	(Release 5)
			Rel-6	(Release 6)

Reason for change:

Currently, the specification contains ambiguous statements regarding what the UE shall do when the IE "DPCH compressed mode info" is not included in the IE "Downlink information common for all radio links".

Summary of change: It is proposed to:

- remove the ambiguous semantics in 10.3.6.24;
- make the inclusion of the IE "DPCH compressed mode info" OP;
- clarify that the text in 8.6.6.15 is also applicable in the case the IE "DPCH compressed mode info" is not received;

T1 impact:

No impact on T1 specifications is foreseen.

Impact analysis:

Impacted functionality: Compressed mode activation

A UE not implementing this CR and having assumed the incorrect behaviour will restart CM patterns erroneously when the IE "DPCH compressed mode info" is not included in the IE "Downlink information common for all radio links".

A UTRAN not implementing this CR and having assumed the incorrect behaviour will assume CM pattern restarts erroneously when the IE "DPCH compressed mode info" is not included in the IE "Downlink information common for all radio links".

Clarification of a function where the specification is ambigous. Does not affect

	implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise
Consequences if # not approved:	If this CR is not approved, in cases where a UTRAN and UE have a different assumption regarding the CM restart, degraded handover performance and dropped calls may be the result.

Clauses affected:	8.6.6.15 ; 10.3.6.24
Other specs Affected:	Y N X Other core specifications X Test specifications O&M Specifications
Other comments:	x

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- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.6 Generic actions on receipt and absence of an information element

// partly skipped //

8.6.6.15 DPCH Compressed mode info

If the IE "DPCH compressed mode info" is included, and if the IE group "transmission gap pattern sequence configuration parameters" is included, the UE shall for each transmission gap pattern sequence perform the following consistency checks:

- 1> if UE, according to its measurement capabilities, and for the measurement purpose indicated by IE "TGMP", requires UL compressed mode for measurements on any of the cells to be measured according to UE variable CELL INFO LIST, and CHOICE 'UL/DL mode' indicates 'DL only':
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if UE, according to its measurement capabilities, and for the measurement purpose indicated by IE "TGMP", requires DL compressed mode for measurements on any of the cells to be measured according to UE variable CELL_INFO_LIST, and CHOICE 'UL/DL mode' indicates 'UL only':
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if UE already has an active transmission gap pattern sequence that, according to IE "TGMP", has the same measurement purpose, and both patterns will be active after the new configuration has been taken into use:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.

If variable INVALID_CONFIGURATION has value FALSE after UE has performed the checks above, the UE shall:

- 1> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag") in the variable TGPS_IDENTITY):
 - 2> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time" (see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
 - 2> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time" (see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- 1> update each pattern sequence to the variable TGPS_IDENTITY according to the IE "TGPSI";
- 1> update into the variable TGPS_IDENTITY the configuration information defined by IE group" transmission gap pattern sequence configuration parameters ";
- 1> after the new configuration has been taken into use:
 - 2> activate the stored pattern sequence corresponding to each IE "TGPSI" for which the "Current TGPS status flag" in the variable TGPS_IDENTITY is set to "active" at the time indicated by IE "TGCFN"; and
 - 2> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 2> if the new configuration is taken into use at the same CFN as indicated by IE "TGCFN":
 - 3> start the concerned pattern sequence immediately at that CFN.

1> monitor if the parallel transmission gap pattern sequences create an illegal overlap, and in case of overlap, take actions as specified in subclause 8.2.11.2.

If the IE "DPCH compressed mode info" is included, and if the IE group "transmission gap pattern sequence configuration parameters" is not included, the UE shall:

- 1> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag" in the variable TGPS_IDENTITY):
 - 2> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use:
 - 3> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS_IDENTITY to "inactive".
 - 2> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time" (see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- 1> after the new configuration has been taken into use:
 - 2> activate, at the time indicated by IE "TGCFN", the stored pattern sequence corresponding to each IE "TGPSI" for which the "TGPS status flag" is set to "activate"; and
 - 2> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 2> if the new configuration is taken into use at the same CFN as indicated by IE "TGCFN":
 - 3> start the concerned pattern sequence immediately at that CFN.

For transmission gap pattern sequences stored in variable TGPS_IDENTITY, but not identified in IE "TGPSI" (either due to absence of the IE "DPCH compressed mode info" in the received message or due to not receiving the concerning TGPSI value in the IE "DPCH compressed mode info"), the UE shall:

- 1> if the received message implies a timing re-initialised hard handover (see subclause 8.3.5.1):
 - 2> deactivate such transmission gap pattern sequences at the beginning of the frame, indicated by IE "Activation time" (see subclause 8.6.3.1) received in this message; and
 - 2> set IE "Current TGPS Status Flag" in corresponding UE variable TGPS IDENTITY to 'inactive'.
- 1> if the received message not implies a timing re-initialised hard handover (see subclause 8.3.5.1):
 - 2> continue such transmission gap pattern sequence according to IE "Current TGPS Status Flag" in the corresponding UE variable TGPS_IDENTITY.

Uplink and downlink compressed mode methods are described in [27]. For UL "higher layer scheduling" compressed mode method and transport format combination selection, see [15].

10.3.6.24 Downlink information common for all radio links

Information Element/Group	Need	Multi	Type and	Semantics	Version
name			reference	description	
Downlink DPCH info common for all RL	OP		Downlink DPCH info common for all RL 10.3.6.18		
CHOICE mode	MP		10.3.0.10		
>FDD	IVII				
>>DPCH compressed mode info	<u>OP</u> MĐ		DPCH compressed mode info 10.3.6.33	Default value is the existing value of DPCH compressed mode information	
>>TX Diversity Mode	MD		TX Diversity Mode 10.3.6.86	Default value is the existing value of TX Diversity mode	
>>SSDT information	OP		SSDT information 10.3.6.77		
>TDD				(no data)	
>>CHOICE TDD option	MP				REL-4
>>>3.84 Mcps TDD				(no data)	REL-4
>>>1.28 Mcps TDD					REL-4
>>>>TSTD indicator	MP		TSTD indicator 10.3.6.85a		REL-4
Default DPCH Offset Value	OP		Default DPCH Offset Value, 10.3.6.16		

TSG-RAN Working Group 2 meeting #33 Sophia-Antipolis, France 12th – 15rd November 2002

R2-023114

CHANGE REQUEST								
*	25.331 CR	1754	≋ rev	3	£	Current version:	5.2.0	#

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the **%** symbols.

Proposed change affects: UICC apps# ME X Radio Access Network Core Network

Title:	Ж	DPCH compressed mode info in Downlink information	npressed mode info in Downlink information common for all RLs					
Source:	Ж	Ericsson						
Work item code:	ж	TEI	Date: ₩	October 2002				
Category:	ж	A	Release: ₩	Rel-5				
		Use one of the following categories:	Use <u>one</u> of	the following releases:				
		F (correction)	2	(GSM Phase 2)				
		A (corresponds to a correction in an earlier release	,	(Release 1996)				
		B (addition of feature),		(Release 1997)				
		C (functional modification of feature)	R98	(Release 1998)				
		D (editorial modification)	R99	(Release 1999)				
		Detailed explanations of the above categories can	Rel-4	(Release 4)				
		be found in 3GPP TR 21.900.	Rel-5	(Release 5)				
			Rel-6	(Release 6)				

Reason for change:

Currently, the specification contains ambiguous statements regarding what the UE shall do when the IE "DPCH compressed mode info" is not included in the IE "Downlink information common for all radio links".

Summary of change: It is proposed to:

- remove the ambiguous semantics in 10.3.6.24;
- make the inclusion of the IE "DPCH compressed mode info" OP;
- clarify that the text in 8.6.6.15 is also applicable in the case the IE "DPCH compressed mode info" is not received;

T1 impact:

No impact on T1 specifications is foreseen.

Impact analysis:

Impacted functionality: Compressed mode activation

A UE not implementing this CR and having assumed the incorrect behaviour will restart CM patterns erroneously when the IE "DPCH compressed mode info" is not included in the IE "Downlink information common for all radio links".

A UTRAN not implementing this CR and having assumed the incorrect behaviour will assume CM pattern restarts erroneously when the IE "DPCH compressed mode info" is not included in the IE "Downlink information common for all radio links".

Clarification of a function where the specification is ambigous. Does not affect

	implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise
Consequences if # not approved:	If this CR is not approved, in cases where a UTRAN and UE have a different assumption regarding the CM restart, degraded handover performance and dropped calls may be the result.

Clauses affected:	8.6.6.15 ; 10.3.6.24
Other specs Affected:	Y N X Other core specifications X Test specifications O&M Specifications
Other comments:	x

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- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.6 Generic actions on receipt and absence of an information element

// partly skipped //

8.6.6.15 DPCH Compressed mode info

If the IE "DPCH compressed mode info" is included, and if the IE group "transmission gap pattern sequence configuration parameters" is included, the UE shall for each transmission gap pattern sequence perform the following consistency checks:

- 1> if UE, according to its measurement capabilities, and for the measurement purpose indicated by IE "TGMP", requires UL compressed mode for measurements on any of the cells to be measured according to UE variable CELL INFO LIST, and CHOICE 'UL/DL mode' indicates 'DL only':
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if UE, according to its measurement capabilities, and for the measurement purpose indicated by IE "TGMP", requires DL compressed mode for measurements on any of the cells to be measured according to UE variable CELL_INFO_LIST, and CHOICE 'UL/DL mode' indicates 'UL only':
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if UE already has an active transmission gap pattern sequence that, according to IE "TGMP", has the same measurement purpose, and both patterns will be active after the new configuration has been taken into use:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.

If variable INVALID_CONFIGURATION has value FALSE after UE has performed the checks above, the UE shall:

- 1> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag") in the variable TGPS_IDENTITY):
 - 2> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time" (see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
 - 2> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time" (see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- 1> update each pattern sequence to the variable TGPS_IDENTITY according to the IE "TGPSI";
- 1> update into the variable TGPS_IDENTITY the configuration information defined by IE group" transmission gap pattern sequence configuration parameters ";
- 1> after the new configuration has been taken into use:
 - 2> activate the stored pattern sequence corresponding to each IE "TGPSI" for which the "Current TGPS status flag" in the variable TGPS_IDENTITY is set to "active" at the time indicated by IE "TGCFN"; and
 - 2> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 2> if the new configuration is taken into use at the same CFN as indicated by IE "TGCFN":
 - 3> start the concerned pattern sequence immediately at that CFN.

1> monitor if the parallel transmission gap pattern sequences create an illegal overlap, and in case of overlap, take actions as specified in subclause 8.2.11.2.

If the IE "DPCH compressed mode info" is included, and if the IE group "transmission gap pattern sequence configuration parameters" is not included, the UE shall:

- 1> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag" in the variable TGPS_IDENTITY):
 - 2> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use:
 - 3> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS_IDENTITY to "inactive".
 - 2> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- 1> after the new configuration has been taken into use:
 - 2> activate, at the time indicated by IE "TGCFN", the stored pattern sequence corresponding to each IE "TGPSI" for which the "TGPS status flag" is set to "activate"; and
 - 2> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 2> if the new configuration is taken into use at the same CFN as indicated by IE "TGCFN":
 - 3> start the concerned pattern sequence immediately at that CFN.

For transmission gap pattern sequences stored in variable TGPS_IDENTITY, but not identified in IE "TGPSI" (either due to absence of the IE "DPCH compressed mode info" in the received message or due to not receiving the concerning TGPSI value in the IE "DPCH compressed mode info"), the UE shall:

- 1> if the received message implies a timing re-initialised hard handover (see subclause 8.3.5.1):
 - 2> deactivate such transmission gap pattern sequences at the beginning of the frame, indicated by IE "Activation time" (see subclause 8.6.3.1) received in this message; and
 - 2> set IE "Current TGPS Status Flag" in corresponding UE variable TGPS IDENTITY to 'inactive'.
- 1> if the received message not implies a timing re-initialised hard handover (see subclause 8.3.5.1):
 - 2> continue such transmission gap pattern sequence according to IE "Current TGPS Status Flag" in the corresponding UE variable TGPS_IDENTITY.

Uplink and downlink compressed mode methods are described in [27]. For UL "higher layer scheduling" compressed mode method and transport format combination selection, see [15].

10.3.6.24 Downlink information common for all radio links

Information Element/Group	Need	Multi	Type and	Semantics	Version
name			reference	description	
Downlink DPCH info common for all RL	OP		Downlink DPCH info common for all RL 10.3.6.18		
CHOICE mode	MP		10.3.0.10		
>FDD	IVII				
>>DPCH compressed mode info	<u>OP</u> MĐ		DPCH compressed mode info 10.3.6.33	Default value is the existing value of DPCH compressed mode information	
>>TX Diversity Mode	MD		TX Diversity Mode 10.3.6.86	Default value is the existing value of TX Diversity mode	
>>SSDT information	OP		SSDT information 10.3.6.77		
>TDD				(no data)	
>>CHOICE TDD option	MP				REL-4
>>>3.84 Mcps TDD				(no data)	REL-4
>>>1.28 Mcps TDD					REL-4
>>>>TSTD indicator	MP		TSTD indicator 10.3.6.85a		REL-4
Default DPCH Offset Value	OP		Default DPCH Offset Value, 10.3.6.16		

TSG-RAN Working Group 2 meeting #33 Sophia-Antipolis, France 12th – 15rd November 2002

R2-023255

CHANGE REQUEST									
*	25.331 CR	1755	≋ rev	1	Ж	Current version: 3.12.0) [#]		

	201001 011 1100 0101	3.12.0
For <u>HELP</u> o	n using this form, see bottom of this page or look at the	pop-up text over the % symbols.
Proposed chang	ge affects: UICC apps業 ME X Radio Ac	ccess Network X Core Network
Title:		
Source:	₩ Ericsson	
Work item code	:∺ <mark>TEI</mark>	Date: # October 2002
Category:	₩ F	Release: # R99
	Use one of the following categories: F (correction) A (corresponds to a correction in an earlier release B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.	Use <u>one</u> of the following releases: 2 (GSM Phase 2)) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)

- Reason for change: # 1) In the current specification, it is not clear that the actions currently indicated to be applicable on receipt of the IE "RB mapping info" or the IE "Transport Format Set" in section 8, also have to be executed at certain other occasions like cell reselection and state transitions. This CR attempts to clarify this behaviour.
 - 2) It is erroneously stated that the TFS of an AM RLC not on RACH may only contain one RLC size. The text should indicate that the TFS can only include 1 RLC size not equal to zero.
 - 3) The specification is ambiguous regarding if an RLC size of 0 corresponds to a TB size of 0 (see R2-022987)

- Summary of change: # 1) A new section has been created in which functionality that also has to be executed at cell reselection or state transition, is copied from the sections on the handling of the IEs RB mapping info" and "Transport Format Set".
 - 2) Clarification is made in 8.6.4.8
 - 3) Related formula is made consistent with the text in the same section (8.6.5.1)

T1 impact:

No impact on T1 specifications is foreseen.

Impact analysis:

Impacted functionality: RB mapping

A UE not implementing this CR and having assumed the incorrect behaviour might not perform certain required actions related to logical channel <->transport channel mapping at state transitions and cell reselection.

A UTRAN not implementing this CR and having assumed the incorrect behaviour will not use the indicated functionality.

Clarification of a function where the specification is ambiguous. Does not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise

Consequences if not approved: # If this CR is not approved, UE and UTRAN might have a different assumption on the applicable RB mapping which may lead to continuous demultiplexing problems and dropped calls.

Clauses affected:	第 8.5.21 (new); 8.6.4.8; 8.6.5.1							
Other specs Affected:	Y N X Other core specifications Test specifications O&M Specifications							
Other comments:	*							

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked \(\mathcal{H} \) contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.5.21 Actions related to Radio Bearer mapping

When the UE receives the IE "RB mapping info" and/or the IE "Transport format set", when the UE performs cell reselection or a state transition, or when the UE releases a RB, the UE shall for each of the configured Radio Bearers:

- 1> configure the MAC with the appropriate transport format set (with computed transport block sizes) for the transport channel used by that RB;
- 1> determine the sets of RLC sizes that apply to the logical channels used by that RB, based on the IEs "RLC size list" and/or the IEs "Logical Channel List" included in the applicable "Transport format set" (either the ones received in the same message or the ones stored if non were received);
- 1> in case the selected multiplexing option is a multiplexing option on RACH:
 - 2> ignore the RLC size indexes that do not correspond to any RLC size within the Transport Format Set stored for RACH.
- 1> if RACH is the transport channel to be used on the uplink, if that RB has a multiplexing option on RACH and if it is using AM:
 - 2> apply the largest size amongst the ones derived according to the previous bullet for the RLC size (or RLC sizes in case the RB is realised using two logical channels) for the corresponding RLC entity.
- NOTE: The IE "RB mapping info" is only included in IE "Predefined RB configurations" in system information when used for Inter-RAT handover to UTRAN and there is no AM RLC size change involved in this case.
- 1> if that RB is using AM and the RLC size applicable to the logical channel transporting data PDUs is different from the one derived from the previously stored configuration:
 - 2> re-establish the corresponding RLC entity;
 - 2> configure the corresponding RLC entity with the new RLC size;
 - 2> for each AM RLC radio bearer in the CN domain as indicated in the IE "CN domain identity" in the IE "RAB info" in the variable ESTABLISHED_RABS whose RLC size is changed; and
 - 2> for each AM RLC signalling radio bearer in the CN domain as indicated in the IE "CN domain identity" in the variable LATEST CONFIGURED CN DOMAIN whose RLC size is changed:
 - 3> if the IE "Status" in the variable CIPHERING STATUS of this CN domain is set to "Started":
 - 4> if the information causing the RLC re-establishment was included in system information:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" for this CN domain that will be included in the CELL UPDATE message following cell reselection.
- NOTE: Since the UE cannot predict the START value at the time of the next CELL UPDATE transmission in the future, UTRAN should desist from changing the RLC size for a signalling radio bearer within a cell.

 Other than this case the change in RLC size for a signalling radio bearer is known to the UE when reading system information following cell reselection.
 - 4> if the RLC re-establishment is caused by a CELL UPDATE CONFIRM:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.
 - 4> if the RLC re-establishment is caused by a reconfiguration message:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" that will be included in the reconfiguration complete message for this CN domain.
- 1> if that RB is using UM:
 - 2> indicate the largest applicable RLC size to the corresponding RLC entity.

- 1> configure MAC multiplexing according to the selected multiplexing option (MAC multiplexing shall only be configured for a logical channel if the transport channel it is mapped on according to the selected multiplexing option is the same as the transport channel another logical channel is mapped on according to the multiplexing option selected for it);
- 1> configure the MAC with the logical channel priorities according to selected multiplexing option;
- 1> configure the MAC with the set of applicable RLC Sizes for each of the logical channels used for that RB;
- 1> if there is no multiplexing option applicable for the transport channels to be used:
 - 2> set the variable INVALID CONFIGURATION to TRUE.
- 1> if there is more than one multiplexing option applicable for the transport channels to be used:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.

8.6.4.8 RB mapping info

If the IE "RB mapping info" is included, the UE shall:

- 1> for each multiplexing option of the RB:
 - 2> if a transport channel that would not exist as a result of the message (i.e. removed in the same message in IE "Deleted DL TrCH information" and IE "Deleted UL TrCH information") is referred to:
 - 3> set the variable INVALID_CONFIGURATION to TRUE.
 - 2> if a multiplexing option that maps a logical channel corresponding to a TM-RLC entity onto RACH, CPCH, FACH or DSCH is included:
 - 3> set the variable INVALID_CONFIGURATION to TRUE.
 - 2> if the multiplexing option realises the radio bearer on the uplink (resp. on the downlink) using two logical channels with different values of the IE "Uplink transport channel type" (resp. of the IE "Downlink transport channel type"):
 - 3> set the variable INVALID_CONFIGURATION to TRUE.
 - 2> if that RB is using TM and the IE "Segmentation indication" is set to TRUE and, based on the multiplexing configuration resulting from this message, the logical channel corresponding to it is mapped onto the same transport channel as another logical channel:
 - 3> set the variable INVALID_CONFIGURATION to TRUE.
 - 2> if the transport channel considered in that multiplexing option is different from RACH and if that RB is using AM and the set of RLC sizes applicable to the logical channel transferring data PDUs has more than one element not equal to zero:
 - 3> set the variable INVALID_CONFIGURATION to TRUE.
 - 2> if that RB is using UM or TM and the multiplexing option realises it using two logical channels:
 - 3> set the variable INVALID CONFIGURATION to TRUE.
 - 2> for each logical channel in that multiplexing option:
 - 3> if the value of the IE "RLC size list" is set to "Explicit list":
 - 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is included in the same message, and the value (index) of any IE "RLC size index" in the IE "Explicit list" does not correspond to an "RLC size" in the IE transport format set of that transport channel given in the message; or
 - 4> if the transport channel this logical channel is mapped on in this multiplexing option is different from RACH, and if a "Transport format set" for that transport channel is not included in the same message, and the value (index) of any IE "RLC size index" in the IE "Explicit list" does not correspond to an "RLC size" in the stored transport format set of that transport channel; or
 - 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is included in the same message, and the value of any IE "Logical channel list" in the transport format set is not set to "Configured"; or
 - 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is not included in the same message, and the value of any IE "Logical channel list" in the stored transport format set of that transport channel is not set to "Configured":
 - 5> set the variable INVALID_CONFIGURATION to TRUE.
 - 3> if the value of the IE "RLC size list" is set to "All":
 - 4> if the transport channel this logical channel is mapped on is RACH; or

- 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is included in the same message, and the value of any IE "Logical channel list" in the transport format set is not set to "Configured"; or
- 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is not included in the same message, and the value of any IE "Logical channel list" in the stored transport format set of that transport channel is not set to "Configured":
 - 5> set the variable INVALID_CONFIGURATION to TRUE.
- 3> if the value of the IE "RLC size list" is set to "Configured":
 - 4> if the transport channel this logical channel is mapped on is RACH; or
 - 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is included in the same message, and for none of the RLC sizes defined for that transport channel in the "Transport format set", the "Logical Channel List" is set to "All" or given as an "Explicit List" which contains this logical channel; or
 - 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is not included in the same message, and for none of the RLC sizes defined in the transport format set stored for that transport channel, the "Logical Channel List" is set to "All" or given as an "Explicit List" which contains this logical channel:
 - 5> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if, as a result of the message this IE is included in, several radio bearers can be mapped onto the same transport channel, and the IE "Logical Channel Identity" was not included in the RB mapping info of any of those radio bearers for a multiplexing option on that transport channel or the same "Logical Channel Identity" was used more than once in the RB mapping info of those radio bearers for the multiplexing options on that transport channel:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the "RB mapping info" is considered as valid according to the rules above:
 - <u>2</u>+> delete all previously stored multiplexing options for that radio bearer;
 - 24> store each new multiplexing option for that radio bearer;
 - 2> perform the actions as specified in subclause 8.5.21;
- 1> if the IE "Uplink transport channel type" is set to the value "RACH":
 - 2> refer the IE "RLC size index" to the RACH Transport Format Set of the first PRACH received in the IE "PRACH system information list" received in System Information Block type 5 or System Information Block type 6.
- 1> determine the sets of RLC sizes that apply to the logical channels used by that RB, based on the IEs "RLC size list" and/or the IEs "Logical Channel List" included in the applicable "Transport format set" (either the ones received in the same message or the ones stored if none were received); and
- 1> in case the selected multiplexing option is a multiplexing option on RACH:
 - 2> ignore the RLC size indexes that do not correspond to any RLC size within the Transport Format Set stored for RACH.
- 1> if RACH is the transport channel to be used on the uplink, if that RB has a multiplexing option on RACH and if it is using AM:
 - 2> apply the largest size amongst the ones derived according to the previous bullet for the RLC size (or RLC sizes in case the RB is realised using two logical channels) for the corresponding RLC entity.
- NOTE: The IE "RB mapping info" is only included in IE "Predefined RB configurations" in system information when used for Inter RAT handover to UTRAN and there is no AM RLC size change involved in this case.

- 1> if that RB is using AM and the RLC size applicable to the logical channel transporting data PDUs is different from the one derived from the previously stored configuration:
 - 2> re establish the corresponding RLC entity;
 - 2> configure the corresponding RLC entity with the new RLC size;
 - 2> for each AM RLC radio bearer in the CN domain as indicated in the IE "CN domain identity" in the IE "RAB info" in the variable ESTABLISHED_RABS whose RLC size is changed; and
 - 2> for each AM RLC signalling radio bearer in the CN domain as indicated in the IE "CN domain identity" in the variable LATEST_CONFIGURED_CN_DOMAIN whose RLC size is changed:
 - 3> if the IE "Status" in the variable CIPHERING_STATUS of this CN domain is set to "Started":
 - 4> if this IE was included in CELL UPDATE CONFIRM:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.
 - 4> if this IE was included in a reconfiguration message:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" that will be included in the reconfiguration complete message for this CN domain.
- 1> if that RB is using UM:
 - 2> indicate the largest applicable RLC size to the corresponding RLC entity.
- 1> configure MAC multiplexing according to the selected multiplexing option (MAC multiplexing shall only be configured for a logical channel if the transport channel it is mapped on according to the selected multiplexing option is the same as the transport channel another logical channel is mapped on according to the multiplexing option selected for it);
- 1> configure the MAC with the logical channel priorities according to selected multiplexing option;
- 1> configure the MAC with the set of applicable RLC Sizes for each of the logical channels used for that RB;
- 1> if there is no multiplexing option applicable for the transport channels to be used in the RRC state indicated in the IE "RRC State Indicator" included in the received message:
 - 2> set the variable INVALID CONFIGURATION to TRUE.
- 1> if there is more than one multiplexing option applicable for the transport channels to be used in the RRC state indicated in the IE "RRC State Indicator" included in the received message:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.

In case IE "RLC info" includes IE "Downlink RLC mode " ("DL RLC logical channel info" is mandatory present) but IE "Number of downlink RLC logical channels" is absent in the corresponding IE "RB mapping info", the parameter values are exactly the same as for the corresponding UL logical channels. In case two multiplexing options are specified for the UL, the first options shall be used as default for the DL. As regards the IE "Channel type", the following rule should be applied to derive the DL channel type from the UL channel included in the IE:

Channel used in UL	DL channel type implied by "same as"
DCH	DCH
RACH	FACH
CPCH	FACH
USCH	DSCH

If ciphering is applied, UTRAN should not map Transparent Mode RBs of different CN domains on the same transport channel. In such case the UE behaviour is not specified.

8.6.5.1 Transport Format Set

If the IE "Transport format set" is included, the UE shall:

- 1> if the transport format set is a RACH TFS received in System Information Block type 5 or 6, and CHOICE "Logical Channel List" has a value different from "Configured":
 - 2> ignore that System Information Block.
- 1> if the transport format set for a downlink transport channel is received in a System Information Block, and CHOICE "Logical Channel List" has a value different from 'ALL':
 - 2> ignore that System Information Block.
- 1> if the transport format set for a downlink transport channel is received in a message on a DCCH, and CHOICE "Logical Channel List" has a value different from 'ALL':
 - 2> keep the transport format set if this exists for that transport channel;
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the value of any IE "RB identity" (and "Logical Channel" for RBs using two UL logical channels) in the IE "Logical channel list" does not correspond to a logical channel indicated to be mapped onto this transport channel in any RB multiplexing option (either included in the same message or previously stored and not changed by this message); or
- 1> if the "Logical Channel List" for any of the RLC sizes defined for that transport channel is set to "Configured" while it is set to "All" or given as an "Explicit List" for any other RLC size; or
- 1> if the "Logical Channel List" for any of the RLC sizes defined for that transport channel is set to "All" and for any logical channel mapped to this transport channel, the value of the "RLC size list" (either provided in the IE "RB mapping info" if included in the same message, or stored) is not set to "Configured"; or
- 1> if the "Logical Channel List" for any of the RLC sizes defined for that transport channel is given as an "Explicit List" that contains a logical channel for which the value of the "RLC size list" (either provided in the IE "RB mapping info" if included in the same message, or stored) is not set to "Configured"; or
- 1> if the "Logical Channel List" for all the RLC sizes defined for that transport channel are given as "Explicit List" and if one of the logical channels mapped onto this transport channel is not included in any of those lists; or
- 1> if the "Logical Channel List" for the RLC sizes defined for that transport channel is set to "Configured" and for any logical channel mapped onto that transport channel, the value of the "RLC size list" (either provided in the IE "RB mapping info" if included in the same message, or stored) is also set to "Configured"; or
- 1> if the IE "Transport Format Set" was not received within the IE "PRACH system information list" and if the "Logical Channel List" for the RLC sizes defined for that transport channel is set to "Configured" and for any logical channel mapped onto that transport channel, the "RLC size list" (either provided in the IE "RB mapping info" if included in the same message, or stored) is given as an "Explicit List" that includes an "RLC size index" that does not correspond to any RLC size in this "Transport Format Set": or
- 1> if the IE "Transport Format Set" was not received within the IE "PRACH system information list", and if that RB is using AM and the set of RLC sizes applicable to the logical channel transferring data PDUs has more than one element not equal to zero:
 - 2> keep the transport format set if this exists for that transport channel;
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the total number of configured transport formats for the transport channel exceeds maxTF:
 - 2> keep the transport format set if this exists for that transport channel;
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the IE "Transport format set" is considered as valid according to the rules above:

- 2> remove a previously stored transport format set if this exists for that transport channel;
- 2> store the transport format set for that transport channel;
- 2> consider the first instance of the parameter *Number of TBs and TTI List* within the *Dynamic transport format information* to correspond to transport format 0 for this transport channel, the second to transport format 1 and so on;
- 2> if the IE "Transport format Set" has the choice "Transport channel type" set to "Dedicated transport channel":
 - 3> calculate the transport block size for all transport formats in the TFS using the following

TB size = RLC size + MAC header size ,<u>if "RLC size" <> 0</u>

TB size = 0 , if "RLC size" = 0

where:

- MAC header size is calculated according to [15] if MAC multiplexing is used. Otherwise it is 0 bits;
- 'RLC size' reflects the RLC PDU size.
- 2> if the IE "Transport format Set" has the choice "Transport channel type" set to "Common transport channel":
 - 3> calculate the transport block size for all transport formats in the TFS using the following:

TB size = RLC size.

- 2> if the IE "Number of Transport blocks" <> 0 and IE "RLC size" = 0, no RLC PDU data exists but only parity bits exist for that transport format;
- 2> if the IE "Number of Transport blocks" = 0, neither RLC PDU neither data nor parity bits exist for that transport format;
- 2> perform the actions as specified in subclause 8.5.21;
- 2> configure the MAC with the new transport format set (with computed transport block sizes) for that transport channel;
- 2> if the RB multiplexing option for a RB mapped onto that transport channel (based on the stored RB multiplexing option) is not modified by this message:
 - 3> determine the sets of RLC sizes that apply to the logical channels used by that RB, based on the IE "Logical Channel List" and/or the IE "RLC Size List" from the previously stored RB multiplexing option.
 - 3> if the IE "Transport Format Set" was received within the IE "PRACH system information list":
 - 4> ignore the RLC size indexes in the stored RB multiplexing option that do not correspond to any RLC size in the received Transport Format Set.
 - 3> if the IE "Transport Format Set" was received within the IE "PRACH system information list", if that RB is using AM and if RACH is the transport channel to be used on the uplink:
 - 4> apply the largest size amongst the ones derived according to the previous bullet for the RLC size (or RLC sizes in case the RB is realised using two logical channels) for the corresponding RLC entity.
 - 3> if the IE "Transport Format Set" was not received within the IE "PRACH system information list", and if that RB is using AM and the set of RLC sizes applicable to the logical channel transferring data PDUs has more than one element:
 - 4> set the variable INVALID_CONFIGURATION to true.
 - 3> if that RB is using AM and the RLC size applicable to the logical channel transporting data PDUs is different from the one derived from the previously stored configuration:
 - 4> re establish the corresponding RLC entity;

- 4> configure the corresponding RLC entity with the new RLC size;
- 4> for each AM RLC radio bearer in the CN domain as indicated in the IE "CN domain identity" in the IE "RAB info" in the variable ESTABLISHED_RABS whose RLC size is changed; and
- 4> for each AM RLC signalling radio bearer in the CN domain as indicated in the IE "CN domain identity" in the variable LATEST_CONFIGURED_CN_DOMAIN whose RLC size is changed:
 - 5> if this IE was included in system information and if the IE "Status" in variable CIPHERING STATUS of this CN domain is set to "Started":
 - 6> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" for this CN domain that will be included in the CELL UPDATE message following cell reselection.
- NOTE: Since the UE cannot predict the START value at the time of the next CELL UPDATE transmission in the future, UTRAN should desist from changing the RLC size for a signalling radio bearer within a cell.

 Other than this case the change in RLC size for a signalling radio bearer is known to the UE when reading system information following cell reselection.
 - 5> if this IE was included in CELL UPDATE CONFIRM and if the IE "Status" in the variable CIPHERING_STATUS of this CN domain is set to "Started":
 - 6> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.
 - 5> if this IE was included in ACTIVE SET UPDATE and if the IE "Status" in the variable CIPHERING_STATUS of this CN domain is set to "Started":
 - 6> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" that will be included in the ACTIVE SET UPDATE COMPLETE message for this CN domain.
 - 3> if that RB is using UM:
 - 4> indicate the largest applicable RLC size to the corresponding RLC entity.
 - 3> configure MAC with the set of applicable RLC Sizes for each of the logical channels used for that RB.

For configuration restrictions on Blind Transport Format Detection, see [27].

TSG-RAN Working Group 2 meeting #33 Sophia-Antipolis, France 12th – 15rd November 2002

R2-023256

(Release 6)

Rel-6

CHANGE REQUEST									
*	25.331 CR	1756	жrev	1	Ж	Current version:	4.7.0	æ	

For HELP o	n u	sing this	form, see k	oottom of th	is page or lo	ok at the p	oop-up text	over the	nbols.
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Title:	ж	Handlir	ng of RB m	apping					
Source:	¥	Ericsso	n						
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Category:	ж	Α				F	Release: ₩	Rel-4	
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- Reason for change: # 1) In the current specification, it is not clear that the actions currently indicated to be applicable on receipt of the IE "RB mapping info" or the IE "Transport Format Set" in section 8, also have to be executed at certain other occasions like cell reselection and state transitions. This CR attempts to clarify this behaviour.
 - 2) It is erroneously stated that the TFS of an AM RLC not on RACH may only contain one RLC size. The text should indicate that the TFS can only include 1 RLC size not equal to zero.
 - 3) The specification is ambiguous regarding if an RLC size of 0 corresponds to a TB size of 0 (see R2-022987)

- Summary of change: # 1) A new section has been created in which functionality that also has to be executed at cell reselection or state transition, is copied from the sections on the handling of the IEs RB mapping info" and "Transport Format Set".
 - 2) Clarification is made in 8.6.4.8
 - 3) Related formula is made consistent with the text in the same section (8.6.5.1)

T1 impact:

No impact on T1 specifications is foreseen.

Impact analysis:

Impacted functionality: RB mapping

A UE not implementing this CR and having assumed the incorrect behaviour might not perform certain required actions related to logical channel <->transport channel mapping at state transitions and cell reselection.

A UTRAN not implementing this CR and having assumed the incorrect behaviour will not use the indicated functionality.

Clarification of a function where the specification is ambiguous. Does not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise

Consequences if not approved: # If this CR is not approved, UE and UTRAN might have a different assumption on the applicable RB mapping which may lead to continuous demultiplexing problems and dropped calls.

Clauses affected:	# 8.5.21 (new); 8.6.4.8; 8.6.5.1
Other specs Affected:	Y N X Other core specifications Test specifications O&M Specifications
Other comments:	*

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked \(\mathcal{H} \) contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.5.21 Actions related to Radio Bearer mapping

When the UE receives the IE "RB mapping info" and/or the IE "Transport format set", when the UE performs cell reselection or a state transition, or when the UE releases a RB, the UE shall for each of the configured Radio Bearers:

- 1> configure the MAC with the appropriate transport format set (with computed transport block sizes) for the transport channel used by that RB;
- 1> determine the sets of RLC sizes that apply to the logical channels used by that RB, based on the IEs "RLC size list" and/or the IEs "Logical Channel List" included in the applicable "Transport format set" (either the ones received in the same message or the ones stored if non were received);
- 1> in case the selected multiplexing option is a multiplexing option on RACH:
 - 2> ignore the RLC size indexes that do not correspond to any RLC size within the Transport Format Set stored for RACH.
- 1> if RACH is the transport channel to be used on the uplink, if that RB has a multiplexing option on RACH and if it is using AM:
 - 2> apply the largest size amongst the ones derived according to the previous bullet for the RLC size (or RLC sizes in case the RB is realised using two logical channels) for the corresponding RLC entity.
- NOTE: The IE "RB mapping info" is only included in IE "Predefined RB configurations" in system information when used for Inter-RAT handover to UTRAN and there is no AM RLC size change involved in this case.
- 1> if that RB is using AM and the RLC size applicable to the logical channel transporting data PDUs is different from the one derived from the previously stored configuration:
 - 2> re-establish the corresponding RLC entity;
 - 2> configure the corresponding RLC entity with the new RLC size;
 - 2> for each AM RLC radio bearer in the CN domain as indicated in the IE "CN domain identity" in the IE "RAB info" in the variable ESTABLISHED_RABS whose RLC size is changed; and
 - 2> for each AM RLC signalling radio bearer in the CN domain as indicated in the IE "CN domain identity" in the variable LATEST CONFIGURED CN DOMAIN whose RLC size is changed:
 - 3> if the IE "Status" in the variable CIPHERING STATUS of this CN domain is set to "Started":
 - 4> if the information causing the RLC re-establishment was included in system information:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" for this CN domain that will be included in the CELL UPDATE message following cell reselection.
- NOTE: Since the UE cannot predict the START value at the time of the next CELL UPDATE transmission in the future, UTRAN should desist from changing the RLC size for a signalling radio bearer within a cell.

 Other than this case the change in RLC size for a signalling radio bearer is known to the UE when reading system information following cell reselection.
 - 4> if the RLC re-establishment is caused by a CELL UPDATE CONFIRM:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.
 - 4> if the RLC re-establishment is caused by a reconfiguration message:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" that will be included in the reconfiguration complete message for this CN domain.
- 1> if that RB is using UM:
 - 2> indicate the largest applicable RLC size to the corresponding RLC entity.

- 1> configure MAC multiplexing according to the selected multiplexing option (MAC multiplexing shall only be configured for a logical channel if the transport channel it is mapped on according to the selected multiplexing option is the same as the transport channel another logical channel is mapped on according to the multiplexing option selected for it);
- 1> configure the MAC with the logical channel priorities according to selected multiplexing option;
- 1> configure the MAC with the set of applicable RLC Sizes for each of the logical channels used for that RB;
- 1> if there is no multiplexing option applicable for the transport channels to be used:
 - 2> set the variable INVALID CONFIGURATION to TRUE.
- 1> if there is more than one multiplexing option applicable for the transport channels to be used:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.

8.6.4.8 RB mapping info

If the IE "RB mapping info" is included, the UE shall:

- 1> for each multiplexing option of the RB:
 - 2> if a transport channel that would not exist as a result of the message (i.e. removed in the same message in IE "Deleted DL TrCH information" and IE "Deleted UL TrCH information") is referred to:
 - 3> set the variable INVALID_CONFIGURATION to TRUE.
 - 2> if a multiplexing option that maps a logical channel corresponding to a TM-RLC entity onto RACH, CPCH, FACH or DSCH is included:
 - 3> set the variable INVALID_CONFIGURATION to TRUE.
 - 2> if the multiplexing option realises the radio bearer on the uplink (resp. on the downlink) using two logical channels with different values of the IE "Uplink transport channel type" (resp. of the IE "Downlink transport channel type"):
 - 3> set the variable INVALID_CONFIGURATION to TRUE.
 - 2> if that RB is using TM and the IE "Segmentation indication" is set to TRUE and, based on the multiplexing configuration resulting from this message, the logical channel corresponding to it is mapped onto the same transport channel as another logical channel:
 - 3> set the variable INVALID_CONFIGURATION to TRUE.
 - 2> if the transport channel considered in that multiplexing option is different from RACH and if that RB is using AM and the set of RLC sizes applicable to the logical channel transferring data PDUs has more than one element not equal to zero:
 - 3> set the variable INVALID_CONFIGURATION to TRUE.
 - 2> if that RB is using UM or TM and the multiplexing option realises it using two logical channels:
 - 3> set the variable INVALID CONFIGURATION to TRUE.
 - 2> for each logical channel in that multiplexing option:
 - 3> if the value of the IE "RLC size list" is set to "Explicit list":
 - 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is included in the same message, and the value (index) of any IE "RLC size index" in the IE "Explicit list" does not correspond to an "RLC size" in the IE transport format set of that transport channel given in the message; or
 - 4> if the transport channel this logical channel is mapped on in this multiplexing option is different from RACH, and if a "Transport format set" for that transport channel is not included in the same message, and the value (index) of any IE "RLC size index" in the IE "Explicit list" does not correspond to an "RLC size" in the stored transport format set of that transport channel; or
 - 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is included in the same message, and the value of any IE "Logical channel list" in the transport format set is not set to "Configured"; or
 - 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is not included in the same message, and the value of any IE "Logical channel list" in the stored transport format set of that transport channel is not set to "Configured":
 - 5> set the variable INVALID_CONFIGURATION to TRUE.
 - 3> if the value of the IE "RLC size list" is set to "All":
 - 4> if the transport channel this logical channel is mapped on is RACH; or

- 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is included in the same message, and the value of any IE "Logical channel list" in the transport format set is not set to "Configured"; or
- 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is not included in the same message, and the value of any IE "Logical channel list" in the stored transport format set of that transport channel is not set to "Configured":
 - 5> set the variable INVALID_CONFIGURATION to TRUE.
- 3> if the value of the IE "RLC size list" is set to "Configured":
 - 4> if the transport channel this logical channel is mapped on is RACH; or
 - 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is included in the same message, and for none of the RLC sizes defined for that transport channel in the "Transport format set", the "Logical Channel List" is set to "All" or given as an "Explicit List" which contains this logical channel; or
 - 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is not included in the same message, and for none of the RLC sizes defined in the transport format set stored for that transport channel, the "Logical Channel List" is set to "All" or given as an "Explicit List" which contains this logical channel:
 - 5> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if, as a result of the message this IE is included in, several radio bearers can be mapped onto the same transport channel, and the IE "Logical Channel Identity" was not included in the RB mapping info of any of those radio bearers for a multiplexing option on that transport channel or the same "Logical Channel Identity" was used more than once in the RB mapping info of those radio bearers for the multiplexing options on that transport channel:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the "RB mapping info" is considered as valid according to the rules above:
 - <u>2</u>+> delete all previously stored multiplexing options for that radio bearer;
 - $\underline{24}$ store each new multiplexing option for that radio bearer;
 - 2> perform the actions as specified in subclause 8.5.21;
- 1> if the IE "Uplink transport channel type" is set to the value "RACH":
 - 2> refer the IE "RLC size index" to the RACH Transport Format Set of the first PRACH received in the IE "PRACH system information list" received in System Information Block type 5 or System Information Block type 6.
- 1> determine the sets of RLC sizes that apply to the logical channels used by that RB, based on the IEs "RLC size list" and/or the IEs "Logical Channel List" included in the applicable "Transport format set" (either the ones received in the same message or the ones stored if none were received); and
- 1> in case the selected multiplexing option is a multiplexing option on RACH:
 - 2> ignore the RLC size indexes that do not correspond to any RLC size within the Transport Format Set stored for RACH.
- 1> if RACH is the transport channel to be used on the uplink, if that RB has a multiplexing option on RACH and if it is using AM:
 - 2> apply the largest size amongst the ones derived according to the previous bullet for the RLC size (or RLC sizes in case the RB is realised using two logical channels) for the corresponding RLC entity.
- NOTE: The IE "RB mapping info" is only included in IE "Predefined RB configurations" in system information when used for Inter RAT handover to UTRAN and there is no AM RLC size change involved in this case.

- 1> if that RB is using AM and the RLC size applicable to the logical channel transporting data PDUs is different from the one derived from the previously stored configuration:
 - 2> re establish the corresponding RLC entity;
 - 2> configure the corresponding RLC entity with the new RLC size;
 - 2> for each AM RLC radio bearer in the CN domain as indicated in the IE "CN domain identity" in the IE "RAB info" in the variable ESTABLISHED RABS whose RLC size is changed; and
 - 2> for each AM RLC signalling radio bearer in the CN domain as indicated in the IE "CN domain identity" in the variable LATEST_CONFIGURED_CN_DOMAIN whose RLC size is changed:
 - 3> if the IE "Status" in the variable CIPHERING_STATUS of this CN domain is set to "Started":
 - 4> if this IE was included in CELL UPDATE CONFIRM:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.
 - 4> if this IE was included in a reconfiguration message:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" that will be included in the reconfiguration complete message for this CN domain.
- 1> if that RB is using UM:
 - 2> indicate the largest applicable RLC size to the corresponding RLC entity.
- 1> configure MAC multiplexing according to the selected multiplexing option (MAC multiplexing shall only be configured for a logical channel if the transport channel it is mapped on according to the selected multiplexing option is the same as the transport channel another logical channel is mapped on according to the multiplexing option selected for it);
- 1> configure the MAC with the logical channel priorities according to selected multiplexing option;
- 1> configure the MAC with the set of applicable RLC Sizes for each of the logical channels used for that RB;
- 1> if there is no multiplexing option applicable for the transport channels to be used in the RRC state indicated in the IE "RRC State Indicator" included in the received message:
 - 2> set the variable INVALID CONFIGURATION to TRUE.
- 1> if there is more than one multiplexing option applicable for the transport channels to be used in the RRC state indicated in the IE "RRC State Indicator" included in the received message:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.

In case IE "RLC info" includes IE "Downlink RLC mode " ("DL RLC logical channel info" is mandatory present) but IE "Number of downlink RLC logical channels" is absent in the corresponding IE "RB mapping info", the parameter values are exactly the same as for the corresponding UL logical channels. In case two multiplexing options are specified for the UL, the first options shall be used as default for the DL. As regards the IE "Channel type", the following rule should be applied to derive the DL channel type from the UL channel included in the IE:

DL channel type implied by "same as"
DCH
FACH
FACH
DSCH

If ciphering is applied, UTRAN should not map Transparent Mode RBs of different CN domains on the same transport channel and it should not map transparent mode SRBs and RBs onto the same transport channel. In such case the UE behaviour is not specified.

8.6.5.1 Transport Format Set

If the IE "Transport format set" is included, the UE shall:

- 1> if the transport format set is a RACH TFS received in System Information Block type 5 or 6, and CHOICE "Logical Channel List" has a value different from "Configured":
 - 2> ignore that System Information Block.
- 1> if the transport format set for a downlink transport channel is received in a System Information Block, and CHOICE "Logical Channel List" has a value different from 'ALL':
 - 2> ignore that System Information Block.
- 1> if the transport format set for a downlink transport channel is received in a message on a DCCH, and CHOICE "Logical Channel List" has a value different from 'ALL':
 - 2> keep the transport format set if this exists for that transport channel;
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the value of any IE "RB identity" (and "Logical Channel" for RBs using two UL logical channels) in the IE "Logical channel list" does not correspond to a logical channel indicated to be mapped onto this transport channel in any RB multiplexing option (either included in the same message or previously stored and not changed by this message); or
- 1> if the "Logical Channel List" for any of the RLC sizes defined for that transport channel is set to "Configured" while it is set to "All" or given as an "Explicit List" for any other RLC size; or
- 1> if the "Logical Channel List" for any of the RLC sizes defined for that transport channel is set to "All" and for any logical channel mapped to this transport channel, the value of the "RLC size list" (either provided in the IE "RB mapping info" if included in the same message, or stored) is not set to "Configured"; or
- 1> if the "Logical Channel List" for any of the RLC sizes defined for that transport channel is given as an "Explicit List" that contains a logical channel for which the value of the "RLC size list" (either provided in the IE "RB mapping info" if included in the same message, or stored) is not set to "Configured"; or
- 1> if the "Logical Channel List" for all the RLC sizes defined for that transport channel are given as "Explicit List" and if one of the logical channels mapped onto this transport channel is not included in any of those lists; or
- 1> if the "Logical Channel List" for the RLC sizes defined for that transport channel is set to "Configured" and for any logical channel mapped onto that transport channel, the value of the "RLC size list" (either provided in the IE "RB mapping info" if included in the same message, or stored) is also set to "Configured"; or
- 1> if the IE "Transport Format Set" was not received within the IE "PRACH system information list" and if the "Logical Channel List" for the RLC sizes defined for that transport channel is set to "Configured" and for any logical channel mapped onto that transport channel, the "RLC size list" (either provided in the IE "RB mapping info" if included in the same message, or stored) is given as an "Explicit List" that includes an "RLC size index" that does not correspond to any RLC size in this "Transport Format Set" : or
- 1> if the IE "Transport Format Set" was not received within the IE "PRACH system information list", and if that RB is using AM and the set of RLC sizes applicable to the logical channel transferring data PDUs has more than one element not equal to zero:
 - 2> keep the transport format set if this exists for that transport channel;
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the total number of configured transport formats for the transport channel exceeds maxTF:
 - 2> keep the transport format set if this exists for that transport channel;
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the IE "Transport format set" is considered as valid according to the rules above:

- 2> remove a previously stored transport format set if this exists for that transport channel;
- 2> store the transport format set for that transport channel;
- 2> consider the first instance of the parameter *Number of TBs and TTI List* within the *Dynamic transport format information* to correspond to transport format 0 for this transport channel, the second to transport format 1 and so on;
- 2> if the IE "Transport format Set" has the choice "Transport channel type" set to "Dedicated transport channel":
 - 3> calculate the transport block size for all transport formats in the TFS using the following

TB size = RLC size + MAC header size , if "RLC size" <> 0

TB size = 0 , if "RLC size" = 0

where:

- MAC header size is calculated according to [15] if MAC multiplexing is used. Otherwise it is 0 bits;
- 'RLC size' reflects the RLC PDU size.
- 2> if the IE "Transport format Set" has the choice "Transport channel type" set to "Common transport channel":
 - 3> calculate the transport block size for all transport formats in the TFS using the following:

TB size = RLC size.

- 2> if the IE "Number of Transport blocks" <> 0 and IE "RLC size" = 0, no RLC PDU data exists but only parity bits exist for that transport format;
- 2> if the IE "Number of Transport blocks" = 0, neither RLC PDU neither data nor parity bits exist for that transport format;
- 2> perform the actions as specified in subclause 8.5.21;
- 2> configure the MAC with the new transport format set (with computed transport block sizes) for that transport
- 2> if the RB multiplexing option for a RB mapped onto that transport channel (based on the stored RB multiplexing option) is not modified by this message:
 - 3> determine the sets of RLC sizes that apply to the logical channels used by that RB, based on the IE "Logical Channel List" and/or the IE "RLC Size List" from the previously stored RB multiplexing option.
 - 3> if the IE "Transport Format Set" was received within the IE "PRACH system information list":
 - 4> ignore the RLC size indexes in the stored RB multiplexing option that do not correspond to any RLC size in the received Transport Format Set.
 - 3> if the IE "Transport Format Set" was received within the IE "PRACH system information list", if that RB is using AM and if RACH is the transport channel to be used on the uplink:
 - 4> apply the largest size amongst the ones derived according to the previous bullet for the RLC size (or RLC sizes in case the RB is realised using two logical channels) for the corresponding RLC entity.
 - 3> if the IE "Transport Format Set" was not received within the IE "PRACH system information list", and if that RB is using AM and the set of RLC sizes applicable to the logical channel transferring data PDUs has more than one element:
 - 4> set the variable INVALID_CONFIGURATION to true.
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 - 4> re establish the corresponding RLC entity;

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- 4> for each AM RLC radio bearer in the CN domain as indicated in the IE "CN domain identity" in the IE "RAB info" in the variable ESTABLISHED_RABS whose RLC size is changed; and
- 4> for each AM RLC signalling radio bearer in the CN domain as indicated in the IE "CN domain identity" in the variable LATEST_CONFIGURED_CN_DOMAIN whose RLC size is changed:
 - 5> if this IE was included in system information and if the IE "Status" in variable CIPHERING STATUS of this CN domain is set to "Started":
 - 6> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" for this CN domain that will be included in the CELL UPDATE message following cell resolution.
- NOTE: Since the UE cannot predict the START value at the time of the next CELL UPDATE transmission in the future, UTRAN should desist from changing the RLC size for a signalling radio bearer within a cell.

 Other than this case the change in RLC size for a signalling radio bearer is known to the UE when reading system information following cell reselection.
 - 5> if this IE was included in CELL UPDATE CONFIRM and if the IE "Status" in the variable CIPHERING STATUS of this CN domain is set to "Started":
 - 6> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.
 - 5> if this IE was included in ACTIVE SET UPDATE and if the IE "Status" in the variable CIPHERING_STATUS of this CN domain is set to "Started":
 - 6> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" that will be included in the ACTIVE SET UPDATE COMPLETE message for this CN domain.
 - 3> if that RB is using UM:
 - 4> indicate the largest applicable RLC size to the corresponding RLC entity.
 - 3> configure MAC with the set of applicable RLC Sizes for each of the logical channels used for that RB.

For configuration restrictions on Blind Transport Format Detection, see [27].

TSG-RAN Working Group 2 meeting #33 Sophia-Antipolis, France 12th – 15rd November 2002

R2-023257

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*	25.331 CR	1757	≋ rev	1	¥	Current version:	5.2.0	¥

		3.2.0
For <u>HELP</u> o	n using this form, see bottom of this page or look at the	pop-up text over the % symbols.
Proposed chang	r e affects: UICC apps Ж ME X Radio Acc	cess Network X Core Network
Title:	★ Handling of RB mapping	
Source:	策 Ericsson	
Work item code	ж <mark>те</mark> !	Date: ** October 2002
Category:	ж <mark>А</mark>	Release: Rel-5
	Use one of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.	Use <u>one</u> of the following releases: 2

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 - 3) Related formula is made consistent with the text in the same section (8.6.5.1)

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Clarification of a function where the specification is ambiguous. Does not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise

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Clauses affected:	第 8.5.21 (new); 8.6.4.8; 8.6.5.1					
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Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked \(\mathcal{H} \) contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.5.21 Actions related to Radio Bearer mapping

When the UE receives the IE "RB mapping info" and/or the IE "Transport format set", when the UE performs cell reselection or a state transition, or when the UE releases a RB, the UE shall for each of the configured Radio Bearers:

- 1> configure the MAC with the appropriate transport format set (with computed transport block sizes) for the transport channel used by that RB;
- 1> determine the sets of RLC sizes that apply to the logical channels used by that RB, based on the IEs "RLC size list" and/or the IEs "Logical Channel List" included in the applicable "Transport format set" (either the ones received in the same message or the ones stored if non were received);
- 1> in case the selected multiplexing option is a multiplexing option on RACH:
 - 2> ignore the RLC size indexes that do not correspond to any RLC size within the Transport Format Set stored for RACH.
- 1> if RACH is the transport channel to be used on the uplink, if that RB has a multiplexing option on RACH and if it is using AM:
 - 2> apply the largest size amongst the ones derived according to the previous bullet for the RLC size (or RLC sizes in case the RB is realised using two logical channels) for the corresponding RLC entity.
- NOTE: The IE "RB mapping info" is only included in IE "Predefined RB configurations" in system information when used for Inter-RAT handover to UTRAN and there is no AM RLC size change involved in this case.
- 1> if that RB is using AM and the RLC size applicable to the logical channel transporting data PDUs is different from the one derived from the previously stored configuration:
 - 2> re-establish the corresponding RLC entity;
 - 2> configure the corresponding RLC entity with the new RLC size;
 - 2> for each AM RLC radio bearer in the CN domain as indicated in the IE "CN domain identity" in the IE "RAB info" in the variable ESTABLISHED_RABS whose RLC size is changed; and
 - 2> for each AM RLC signalling radio bearer in the CN domain as indicated in the IE "CN domain identity" in the variable LATEST CONFIGURED CN DOMAIN whose RLC size is changed:
 - 3> if the IE "Status" in the variable CIPHERING STATUS of this CN domain is set to "Started":
 - 4> if the information causing the RLC re-establishment was included in system information:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" for this CN domain that will be included in the CELL UPDATE message following cell reselection.
- NOTE: Since the UE cannot predict the START value at the time of the next CELL UPDATE transmission in the future, UTRAN should desist from changing the RLC size for a signalling radio bearer within a cell.

 Other than this case the change in RLC size for a signalling radio bearer is known to the UE when reading system information following cell reselection.
 - 4> if the RLC re-establishment is caused by a CELL UPDATE CONFIRM:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.
 - 4> if the RLC re-establishment is caused by a reconfiguration message:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" that will be included in the reconfiguration complete message for this CN domain.
- 1> if that RB is using UM:
 - 2> indicate the largest applicable RLC size to the corresponding RLC entity.

- 1> configure MAC multiplexing according to the selected multiplexing option (MAC multiplexing shall only be configured for a logical channel if the transport channel it is mapped on according to the selected multiplexing option is the same as the transport channel another logical channel is mapped on according to the multiplexing option selected for it);
- 1> configure the MAC with the logical channel priorities according to selected multiplexing option;
- 1> configure the MAC with the set of applicable RLC Sizes for each of the logical channels used for that RB;
- 1> if there is no multiplexing option applicable for the transport channels to be used:
 - 2> set the variable INVALID CONFIGURATION to TRUE.
- 1> if there is more than one multiplexing option applicable for the transport channels to be used:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.

8.6.4.8 RB mapping info

If the IE "RB mapping info" is included, the UE shall:

- 1> for each multiplexing option of the RB:
 - 2> if a transport channel that would not exist as a result of the message (i.e. removed in the same message in IE "Deleted DL TrCH information" and IE "Deleted UL TrCH information") is referred to:
 - 3> set the variable INVALID_CONFIGURATION to TRUE.
 - 2> if a multiplexing option that maps a logical channel corresponding to a TM-RLC entity onto RACH, CPCH, FACH or DSCH is included:
 - 3> set the variable INVALID_CONFIGURATION to TRUE.
 - 2> if the multiplexing option realises the radio bearer on the uplink (resp. on the downlink) using two logical channels with different values of the IE "Uplink transport channel type" (resp. of the IE "Downlink transport channel type"):
 - 3> set the variable INVALID_CONFIGURATION to TRUE.
 - 2> if that RB is using TM and the IE "Segmentation indication" is set to TRUE and, based on the multiplexing configuration resulting from this message, the logical channel corresponding to it is mapped onto the same transport channel as another logical channel:
 - 3> set the variable INVALID_CONFIGURATION to TRUE.
 - 2> if the transport channel considered in that multiplexing option is different from RACH and if that RB is using AM and the set of RLC sizes applicable to the logical channel transferring data PDUs has more than one element not equal to zero:
 - 3> set the variable INVALID_CONFIGURATION to TRUE.
 - 2> if that RB is using UM or TM and the multiplexing option realises it using two logical channels:
 - 3> set the variable INVALID CONFIGURATION to TRUE.
 - 2> for each logical channel in that multiplexing option:
 - 3> if the value of the IE "RLC size list" is set to "Explicit list":
 - 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is included in the same message, and the value (index) of any IE "RLC size index" in the IE "Explicit list" does not correspond to an "RLC size" in the IE transport format set of that transport channel given in the message; or
 - 4> if the transport channel this logical channel is mapped on in this multiplexing option is different from RACH, and if a "Transport format set" for that transport channel is not included in the same message, and the value (index) of any IE "RLC size index" in the IE "Explicit list" does not correspond to an "RLC size" in the stored transport format set of that transport channel; or
 - 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is included in the same message, and the value of any IE "Logical channel list" in the transport format set is not set to "Configured"; or
 - 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is not included in the same message, and the value of any IE "Logical channel list" in the stored transport format set of that transport channel is not set to "Configured":
 - 5> set the variable INVALID_CONFIGURATION to TRUE.
 - 3> if the value of the IE "RLC size list" is set to "All":
 - 4> if the transport channel this logical channel is mapped on is RACH; or

- 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is included in the same message, and the value of any IE "Logical channel list" in the transport format set is not set to "Configured"; or
- 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is not included in the same message, and the value of any IE "Logical channel list" in the stored transport format set of that transport channel is not set to "Configured":
 - 5> set the variable INVALID_CONFIGURATION to TRUE.
- 3> if the value of the IE "RLC size list" is set to "Configured":
 - 4> if the transport channel this logical channel is mapped on is RACH; or
 - 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is included in the same message, and for none of the RLC sizes defined for that transport channel in the "Transport format set", the "Logical Channel List" is set to "All" or given as an "Explicit List" which contains this logical channel; or
 - 4> if a "Transport format set" for the transport channel this logical channel is mapped on in this multiplexing option is not included in the same message, and for none of the RLC sizes defined in the transport format set stored for that transport channel, the "Logical Channel List" is set to "All" or given as an "Explicit List" which contains this logical channel:
 - 5> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if, as a result of the message this IE is included in, several radio bearers can be mapped onto the same transport channel, and the IE "Logical Channel Identity" was not included in the RB mapping info of any of those radio bearers for a multiplexing option on that transport channel or the same "Logical Channel Identity" was used more than once in the RB mapping info of those radio bearers for the multiplexing options on that transport channel:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the "RB mapping info" is considered as valid according to the rules above:
 - <u>2</u>+> delete all previously stored multiplexing options for that radio bearer;
 - $\underline{24}$ store each new multiplexing option for that radio bearer;
 - 2> perform the actions as specified in subclause 8.5.21;
- 1> select and configure the multiplexing options applicable for the transport channels to be used;
- 1> if the IE "Uplink transport channel type" is set to the value "RACH":
 - 2> in FDD:
 - 3> refer the IE "RLC size index" to the RACH Transport Format Set of the first PRACH received in the IE "PRACH system information list" received in SIB5 or SIB6.
 - 2> in TDD:
 - 3> use the first Transport Format of the PRACH of the IE "PRACH system information list" at the position equal to the value in the IE "RLC size index".
- 1> determine the sets of RLC sizes that apply to the logical channels used by that RB, based on the IEs "RLC size list" and/or the IEs "Logical Channel List" included in the applicable "Transport format set" (either the ones received in the same message or the ones stored if none were received); and
- 1> in case the selected multiplexing option is a multiplexing option on RACH:
 - 2> ignore the RLC size indexes that do not correspond to any RLC size within the Transport Format Set stored for RACH.
- 1> if RACH is the transport channel to be used on the uplink, if that RB has a multiplexing option on RACH and if it is using AM:

- 2> apply the largest size amongst the ones derived according to the previous bullet for the RLC size (or RLC sizes in case the RB is realised using two logical channels) for the corresponding RLC entity.
- 1> if that RB is using AM and the RLC size applicable to the logical channel transporting data PDUs is different from the one derived from the previously stored configuration:
 - 2> re establish the corresponding RLC entity;
 - 2> configure the corresponding RLC entity with the new RLC size;
 - 2> for each AM RLC radio bearer in the CN domain as indicated in the IE "CN domain identity" in the IE "RAB info" in the variable ESTABLISHED RABS whose RLC size is changed; and
 - 2> for each AM RLC signalling radio bearer in the CN domain as indicated in the IE "CN domain identity" in the variable LATEST_CONFIGURED_CN_DOMAIN whose RLC size is changed:
 - 3> if the IE "Status" in the variable CIPHERING_STATUS of this CN domain is set to "Started":
 - 4> if this IE was included in system information:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" for this CN domain that will be included in the CELL UPDATE message that will be sent before the next transmission.
 - 4> if this IE was included in CELL UPDATE CONFIRM:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.
 - 4> if this IE was included in a reconfiguration message:
 - 5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" that will be included in the reconfiguration complete message for this CN domain.
- 1> if that RB is using UM:
 - 2> indicate the largest applicable RLC size to the corresponding RLC entity.
- 1> configure MAC multiplexing according to the selected multiplexing option (MAC multiplexing shall only be configured for a logical channel if the transport channel it is mapped on according to the selected multiplexing option is the same as the transport channel another logical channel is mapped on according to the multiplexing option selected for it);
- 1> configure the MAC with the logical channel priorities according to selected multiplexing option;
- 1> configure the MAC with the set of applicable RLC Sizes for each of the logical channels used for that RB;
- 1> if there is no multiplexing option applicable for the transport channels to be used:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if there is more than one multiplexing option applicable for the transport channels to be used:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.

In case IE "RLC info" includes IE "Downlink RLC mode" ("DL RLC logical channel info" is mandatory present) but IE "Number of downlink RLC logical channels" is absent in the corresponding IE "RB mapping info", the parameter values are exactly the same as for the corresponding UL logical channels. In case two multiplexing options are specified for the UL, the first options shall be used as default for the DL. As regards the IE "Channel type", the following rule should be applied to derive the DL channel type from the UL channel included in the IE:

Channel used in UL	DL channel type implied by
	"same as"

DCH DCH RACH FACH CPCH FACH USCH DSCH

If ciphering is applied, UTRAN should not map Transparent Mode RBs of different CN domains on the same transport channel and it should not map transparent mode SRBs and RBs onto the same transport channel. In such case the UE behaviour is not specified.

8.6.5.1 Transport Format Set

If the IE "Transport format set" is included, the UE shall:

- 1> if the transport format set is a RACH TFS received in System Information Block type 5 or 6, and CHOICE "Logical Channel List" has a value different from "Configured":
 - 2> ignore that System Information Block.
- 1> if the transport format set for a downlink transport channel is received in a System Information Block, and CHOICE "Logical Channel List" has a value different from 'ALL':
 - 2> ignore that System Information Block.
- 1> if the transport format set for a downlink transport channel is received in a message on a DCCH, and CHOICE "Logical Channel List" has a value different from 'ALL':
 - 2> keep the transport format set if this exists for that transport channel;
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the value of any IE "RB identity" (and "Logical Channel" for RBs using two UL logical channels) in the IE "Logical channel list" does not correspond to a logical channel indicated to be mapped onto this transport channel in any RB multiplexing option (either included in the same message or previously stored and not changed by this message); or
- 1> if the "Logical Channel List" for any of the RLC sizes defined for that transport channel is set to "Configured" while it is set to "All" or given as an "Explicit List" for any other RLC size; or
- 1> if the "Logical Channel List" for any of the RLC sizes defined for that transport channel is set to "All" and for any logical channel mapped to this transport channel, the value of the "RLC size list" (either provided in the IE "RB mapping info" if included in the same message, or stored) is not set to "Configured"; or
- 1> if the "Logical Channel List" for any of the RLC sizes defined for that transport channel is given as an "Explicit List" that contains a logical channel for which the value of the "RLC size list" (either provided in the IE "RB mapping info" if included in the same message, or stored) is not set to "Configured"; or
- 1> if the "Logical Channel List" for all the RLC sizes defined for that transport channel are given as "Explicit List" and if one of the logical channels mapped onto this transport channel is not included in any of those lists; or
- 1> if the "Logical Channel List" for the RLC sizes defined for that transport channel is set to "Configured" and for any logical channel mapped onto that transport channel, the value of the "RLC size list" (either provided in the IE "RB mapping info" if included in the same message, or stored) is also set to "Configured"; or
- 1> if the IE "Transport Format Set" was not received within the IE "PRACH system information list" and if the "Logical Channel List" for the RLC sizes defined for that transport channel is set to "Configured" and for any logical channel mapped onto that transport channel, the "RLC size list" (either provided in the IE "RB mapping info" if included in the same message, or stored) is given as an "Explicit List" that includes an "RLC size index" that does not correspond to any RLC size in this "Transport Format Set": or
- 1> if the IE "Transport Format Set" was not received within the IE "PRACH system information list", and if that RB is using AM and the set of RLC sizes applicable to the logical channel transferring data PDUs has more than one element not equal to zero:

- 2> keep the transport format set if this exists for that transport channel;
- 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the total number of configured transport formats for the transport channel exceeds maxTF:
 - 2> keep the transport format set if this exists for that transport channel;
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the IE "Transport format set" is considered as valid according to the rules above:
 - 2> remove a previously stored transport format set if this exists for that transport channel;
 - 2> store the transport format set for that transport channel;
 - 2> consider the first instance of the parameter *Number of TBs and TTI List* within the *Dynamic transport format information* to correspond to transport format 0 for this transport channel, the second to transport format 1 and so on;
 - 2> if the IE "Transport format Set" has the choice "Transport channel type" set to "Dedicated transport channel":
 - 3> calculate the transport block size for all transport formats in the TFS using the following

TB size = RLC size + MAC header size
$$\frac{\text{, if "RLC size"}}{\text{on the size}} < 0$$
TB size = 0 $\frac{\text{, if "RLC size"}}{\text{, if "RLC size"}} = 0$

where:

- MAC header size is calculated according to [15] if MAC multiplexing is used. Otherwise it is 0 bits;
- 'RLC size' reflects the RLC PDU size.
- 2> if the IE "Transport format Set" has the choice "Transport channel type" set to "Common transport channel":
 - 3> calculate the transport block size for all transport formats in the TFS using the following:

TB size =
$$RLC$$
 size.

- 2> if the IE "Number of Transport blocks" <> 0 and IE "RLC size" = 0, no RLC PDU data exists but only parity bits exist for that transport format;
- 2> if the IE "Number of Transport blocks" = 0, neither RLC PDU neither data nor parity bits exist for that transport format;
- 2> perform the actions as specified in subclause 8.5.21;
- 2> configure the MAC with the new transport format set (with computed transport block sizes) for that transport channel;
- 2> if the RB multiplexing option for a RB mapped onto that transport channel (based on the stored RB multiplexing option) is not modified by this message:
 - 3> determine the sets of RLC sizes that apply to the logical channels used by that RB, based on the IE "Logical Channel List" and/or the IE "RLC Size List" from the previously stored RB multiplexing option.
 - 3> if the IE "Transport Format Set" was received within the IE "PRACH system information list":
 - 4> ignore the RLC size indexes in the stored RB multiplexing option that do not correspond to any RLC size in the received Transport Format Set.
 - 3> if the IE "Transport Format Set" was received within the IE "PRACH system information list", if that RB is using AM and if RACH is the transport channel to be used on the uplink:
 - 4> apply the largest size amongst the ones derived according to the previous bullet for the RLC size (or RLC sizes in case the RB is realised using two logical channels) for the corresponding RLC entity.

- 3> if the IE "Transport Format Set" was not received within the IE "PRACH system information list", and if that RB is using AM and the set of RLC sizes applicable to the logical channel transferring data PDUs has more than one element:
 - 4> set the variable INVALID_CONFIGURATION to true.
- 3> if that RB is using AM and the RLC size applicable to the logical channel transporting data PDUs is different from the one derived from the previously stored configuration:
 - 4> re establish the corresponding RLC entity;
 - 4> configure the corresponding RLC entity with the new RLC size;
 - 4> for each AM RLC radio bearer in the CN domain as indicated in the IE "CN domain identity" in the IE "RAB info" in the variable ESTABLISHED_RABS whose RLC size is changed; and
 - 4> for each AM RLC signalling radio bearer in the CN domain as indicated in the IE "CN domain identity" in the variable LATEST_CONFIGURED_CN_DOMAIN whose RLC size is changed:
 - 5> if this IE was included in system information and if the IE "Status" in variable CIPHERING_STATUS of this CN domain is set to "Started":
 - 6> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" for this CN domain that will be included in the CELL UPDATE message following cell reselection.
- NOTE: Since the UE cannot predict the START value at the time of the next CELL UPDATE transmission in the future, UTRAN should desist from changing the RLC size for a signalling radio bearer within a cell.

 Other than this case the change in RLC size for a signalling radio bearer is known to the UE when reading system information following cell reselection.
 - 5> if this IE was included in CELL UPDATE CONFIRM and if the IE "Status" in the variable CIPHERING_STATUS of this CN domain is set to "Started":
 - 6> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.
 - 5> if this IE was included in ACTIVE SET UPDATE and if the IE "Status" in the variable CIPHERING_STATUS of this CN domain is set to "Started":
 - 6> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" that will be included in the ACTIVE SET UPDATE COMPLETE message for this CN domain.
 - 3> if that RB is using UM:
 - 4> indicate the largest applicable RLC size to the corresponding RLC entity.
 - 3> configure MAC with the set of applicable RLC Sizes for each of the logical channels used for that RB.

For configuration restrictions on Blind Transport Format Detection, see [27].

3GPP TSG-RAN2 Meeting #33 Sophia Antipolis, France, 11th-15th November 2002

	CHANGE REQUEST							
*	25.331	CR 1764	ж rev	-	¥	Current version: 3.12.0) #	
For <u>HELP</u> o	n using this for	m, see bottom of t	his page or l	ook a	at th	e pop-up text over the 第 sy	rmbols.	
Proposed chan	ge affects: \	JICC apps#	ME X	Rad	io A	ccess Network X Core N	etwork	

Title:	\mathfrak{R}	RLC window size in default configurations		
Source:	\mathfrak{R}	Ericsson		
Work item code.	: #:	TEI	Date: ₩	15 November 2002
Category:	\mathfrak{R}	F	Release: ₩	R99
,		Use one of the following categories:	Use one of	the following releases:
		F (correction)	2	(GSM Phase 2)
		A (corresponds to a correction in an earlier release)		(Release 1996)
		B (addition of feature),	R97	(Release 1997)
		C (functional modification of feature)		(Release 1998)
		D (editorial modification)	R99	(Release 1999)
		Detailed explanations of the above categories can	Rel-4	(Release 4)
		be found in 3GPP <u>TR 21.900</u> .	Rel-5	(Release 5)
			Rel-6	(Release 6)

Reason for change: # The RLC window sizes on SRB2 and SRB3 in the default configuration used at handover from GSM where discussed at WG2 #32 (see R2-022651).

The current RLC window sizes of 128 on the SRBs require 8 kbyte of RLC buffer memory. For low end UEs with 10kbyte RLC buffer memory, the remaining 2 kbyte memory is insufficient to setup SRB4 and a PS RAB.

To solve the above problem it is proposed to lower the RLC window sizes from 128 to 32 for SRB2 and SRB3 in the default configurations, for UEs with 10 kbyte RLC memory. For UEs with larger RLC buffer memory, the current values are kept.

Summary of change: # The RLC window sizes for SRB2 and SRB3 are changed from 128 to 32 for UEs with 10 kbyte memory in the default configurations used at handover from GSM.

Consequences if not approved:

If no change is made, the functionality for low end UEs with 10kbyte RLC buffer memory will be limited. Handover from GSM is possible, but a subsequent setup of SRB4 and a PS RAB will lead to significantly lower performance.

Backwards compatibility analysis:

If the CR is not implemented:

Setup of SRB4 and PS RAB after HO to GSM requires low window sizes on SRB4 and the PS RAB.

If the CR is implemented in UTRAN but not in the UE:

The communication on SRB2 and SRB3 will be inefficient due to that the RLC window sizes in UE and UTRAN are different. All RLC PDUs received outside the Rx window will be discarded but later retransmitted by RLC. This can be avoided by the UTRAN by using a window size of 32 in DL and 128 in UL, wich will handle UEs independent on if they have implemented the CR or not.

If the CR is implemented in the UE but not in UTRAN:

The communication on SRB2 and SRB3 will be inefficient due to that the RLC window sizes in UE and UTRAN are different. All RLC PDUs received outside the Rx window will be discarded but later retransmitted by RLC. This can be avoided by the UTRAN by using a window size of 32 in DL and 128 in UL, wich will handle UEs independent on if they have implemented the CR or not.

Clauses affected:	第 13.7
Other specs affected:	Y N X Other core specifications Test specifications O&M Specifications
Other comments:	*

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked \(\mathcal{H} \) contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

13.7 Parameter values for default radio configurations

The UE shall support the use of the default radio configurations that are specified in the following.

NOTE 1: These configurations are based on [41] and cover a number of RAB and signalling connection configurations.

In the table that is used to specify the parameter values for these default configurations, the following principles are used:

- Optional IEs that are not used are omitted;
- In case no parameter value is specified in a column, this means the value given the previous (left side) column applies.
- NOTE 2: If needed, signalling radio bearer RB4 is established after the completion of handover.
- NOTE 3: For each default configuration, the value of both FDD and TDD parameters are specified. All parameters apply to both FDD and TDD modes, unless explicitly stated otherwise. It should be noted that in this respect default configurations differ from pre-defined configurations, which only include parameter values for one mode.

NOTE 4: The transport format sizes, indicated in the following table, concern the RLC PDU size, since all configurations concern dedicated channels. The transport block sizes indicated in TS 34.108 are different since these include the size of the MAC header.

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech + 3.4 kbps signalling	12.2 kbps speech + 3.4 kbps signalling
Ref 34.108	2	3	6	4
Default configuration identity	0	1	2	3
RB INFORMATION				
rb-Identity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	RIc-info	RIc-info	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM RB5-RB6: TM	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3: NoDiscard	RB1: N/A RB2- RB3: NoDiscard	RB1: N/A RB2- RB3: NoDiscard RB5- RB6: N/A	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15 RB5- RB6: N/A	RB1: N/A RB2- RB3: 15 RB5- RB7: N/A
>>transmissionWindowSiz e	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB6: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300 RB5- RB6: N/A	RB1: N/A RB2- RB3: 300 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1	RB1: N/A RB2- RB3: 1	RB1: N/A RB2- RB3: 1 RB5- RB6: N/A	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below RB5- RB6: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech	12.2 kbps speech
		Signalling	3.4 kbps signalling	3.4 kbps signalling
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 100	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A RB5- RB6: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM RB5- RB6: TM	RB1: UM RB2- RB3: AM RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE	RB1: N/A RB2- RB3: TRUE	RB1: N/A RB2- RB3: TRUE RB5- RB6: N/A	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128 <u>for</u>	RB1: N/A RB2- RB3: 128 <u>for</u>	RB1: N/A RB2- RB3: 128 <u>for</u>	RB1: N/A RB2- RB3: 128 <u>for</u>
	UEs with more than 10 kbyte "total RLC AM buffer size" and	UEs with more than 10 kbyte "total RLC AM buffer size" and	UEs with more than 10 kbyte "total RLC AM buffer size" and	UEs with more than 10 kbyte "total RLC AM buffer size" and
	32 otherwise	32 otherwise	32 otherwise RB5- RB6: N/A	32 otherwise RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below RB5- RB6: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 100	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A RB5- RB6: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
rb-MappingInfo				
>UL- LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
>>ul- TransportChannelType	Dch DD0 4	Dch DD0 4	Dch DDC C	Dch DD0 4
>>>transportChannelldentit y	RB1- RB3: 1	RB1- RB3: 1	RB1- RB3: 3 RB5: 1, RB6: 2	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured	RB1- RB3: configured	RB1- RB3: configured RB5- RB6: N/A	RB1- RB3: configured RB5- RB7: N/A
>>mac- LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: 5	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL- logicalChannelMappingList			1130 1130.0	TOO TOO
>>Mapping option 1 >>>dl-	One mapping option Dch	One mapping option Dch	One mapping option Dch	One mapping option Dch
TransportChannelType		55. 5		
>>>>transportChannelIden tity	RB1- RB3: 1	RB1- RB3: 1	RB1- RB3: 3 RB5: 1, RB6: 2	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH			NDO- NDO. IV/A	NDJ- NDT. IV/A
UL- AddReconfTransChInfoList				
>Uplink transport channel type	dch	dch	dch	dch

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech	12.2 kbps speech
		Signalling	3.4 kbps signalling	3.4 kbps signalling
>transportChannelIdentity	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>transportFormatSet	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
>>dynamicTF-information				
>>>tf0/ tf0,1	TrCH1: (0x144, 1x144)	TrCH1: (0x144, 1x144)	TrCH1: (0x75) TrCH2: (0x 84 1x84) TrCH3: (0x144, 1x144)	TrCH1: (0x81) TrCH2: (0x 103, 1x103) TrCH3: (0x 60, 1x60) TrCH4: (0x144, 1x144)
>>>rlcSize	BitMode	BitMode	BitMode	BitMode
>>>>sizeType	TrCH1: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 75 TrCH2: type 1: 84 TrCH3: 2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 81 TrCH2: type 1: 103 TrCH3: type 1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>numberOfTbSizeList	TrCH1: Zero, one	TrCH1: Zero, one	TrCH1: Zero TrCH2-3: Zero, one	TrCH1: Zero TrCH2-4: Zero, one
>>>>logicalChannelList	All	All	All	All
>>>tf 1	N/A	N/A	TrCH1: (1x39)	TrCH1: (1x39)
			TrCH2- TrCH4: N/A	TrCH2- TrCH4: N/A
>>>numberOfTransportBl ocks			TrCH1: One	TrCH1: One
>>>rlc-Size			TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType			TrCH1: 1: 39	TrCH1: 1: 39
>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>logicalChannelList			TrCH1: all	TrCH1: all
>>>tf 2	N/A	N/A	TrCH1: (1x75) TrCH2- TrCH3: N/A	TrCH1: (1x81) TrCH2- TrCH4: N/A
>>>numberOfTransportBl ocks			TrCH1: Zero	TrCH1: Zero
>>>rlc-Size			TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 75	TrCH1: type 1: 81
>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>logicalChannelList			TrCH1: all	TrCH1: all
>>semistaticTF-Information				
>>>tti	TrCH1: 40	TrCH1: 10	TrCH1- TrCH2: 20 TrCH3: 40	TrCH1- TrCH3: 20 TrCH4: 40
>>>channelCodingType	Convolutional	Convolutional	Convolutional	Convolutional
>>>codingRate	TrCH1: Third	TrCH1: Third	TrCH1- TrCH2: Third TrCH3: Third	TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 160	TrCH1: 160	TrCH1: 200 TrCH2: 190 TrCH3: 160	TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160
>>>crc-Size	TrCH1: 16	TrCH1: 16	TrCH1: 12 TrCH2: 0 TrCH3: 16	TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16
DL-				
AddReconfTransChInfoList >Downlink transport channel type	dch	dch	dch	dch
>dl- TransportChannelIdentity (should be as for UL)	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech	12.2 kbps speech
		Signalling	3.4 kbps signalling	3.4 kbps signalling
>tfs-SignallingMode	SameAsUL	SameAsUL	Explicit <only and="" below="" different="" is="" on="" shown="" tf0="" trch1=""></only>	Explicit <only and="" below="" different="" is="" on="" shown="" tf0="" trch1=""></only>
>>transportFormatSet			DedicatedTransChT FS	DedicatedTransChT FS
>>>dynamicTF-information >>>>tf0/ tf0,1			TrCH1: (1x0)	TrCH1: (1x0)
>>>rlcSize			BitMode	bitMode
>>>>sizeType			TrCH1: type 1: 0	TrCH1: type 1: 0
>>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>logicalChannelList			All	All
>>ULTrCH-ld	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>dch-QualityTarget				
>>bler-QualityValue	TrCH1: 5x10 ⁻²	TrCH1: 5x10 ⁻²	TrCH1: 7x10 ⁻³ TrCH2- TrCH3: Absent	TrCH1: 7x10 ⁻³ TrCH2- TrCH4: Absent
TrCH INFORMATION, COMMON				
ul-CommonTransChInfo				
>tfcs-ID (TDD only)	1	1	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE	FALSE
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling
>>explicitTFCS- ConfigurationMode	Complete	Complete	Complete	Complete
>>>ctfcSize	Ctfc2Bit	Ctfc2Bit	Ctfc4Bit	Ctfc6Bit
>>>>TFCS representation	Addition	Addition	Addition	Addition
>>>>TFCS list				
>>>>TFCS 1	(TF0)	(TF0)	(TF0, TF0, TF0)	(TF0, TF0, TF0, TF0)
>>>>>ctfc	0	0	0	0
>>>>>gainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>>referenceTFCId	0	0	0	0
>>>>TFCS 2	(TF1)	(TF1)	(TF1, TF0, TF0)	(TF1, TF0, TF0, TF0)
>>>>>ctfc	1	1	1	1
>>>>>gainFactorInform ation	Signalled	Signalled	Computed	Computed
>>>>>βc (FDD only)	11	11	N/A	N/A
>>>>>βd	15	15	N/A	N/A
>>>>>>referenceTFCId	0	0	0	0
>>>>TFCS 3			(TF2, TF1, TF0)	(TF2, TF1, TF1, TF0)
>>>>>ctfc			5	11
>>>>>gainFactorInform ation			Computed	Computed
>>>>>>referenceTFCId			0	0
>>>>TFCS 4			(TF0, TF0, TF1)	(TF0, TF0, TF0, TF1)
>>>>>ctfc			6	12
>>>>>gainFactorInform ation			Computed	Computed
>>>>>βc (FDD only)			N/A	N/A
>>>>>βd			N/A	N/A
>>>>>referenceTFCId			0	0
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Configuration	3.4 kbps signalling	13.6 kbps	7.95 kbps speech	12.2 kbps speech
		signalling	+ 3.4 kbps signalling	+ 3.4 kbps signalling
			3.4 Kbps signalling	3.4 KDPS Signalling
>>>>TFCS 5			(TF1, TF0, TF1)	(TF1, TF0, TF0, TF1)
>>>>>ctfc			7	13
>>>>>gainFactorInform ation			Computed	Computed
>>>>>>referenceTFCld			0	0
>>>>TFCS 6			(TF2, TF1, TF1)	(TF2, TF1, TF1, TF1)
>>>>>ctfc			11	23
>>>>>gainFactorInform ation			Signalled	Signalled
>>>>> βc (FDD only)			11	11
>>>>>βd			15	15
>>>>>referenceTFCId			0	0
dl-CommonTransChInfo			-	
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION FDD				
UL-DPCH-InfoPredef				
>ul-DPCH- PowerControlInfo				
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize	1	1	1	1
>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>puncturingLimit	1	1	1	0.88
DL-				
CommonInformationPredef				
>dl-DPCH-InfoCommon				
>>spreadingFactor	256	128	128	128
>>tfci-Existence	FALSE	FALSE	FALSE	FALSE
>>pilotBits	4	4	4	4
>>positionFixed	N/A	N/A	Fixed	Fixed
PhyCH INFORMATION TDD				
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo				
>>dpch-ConstantValue	-0	0	0	0
>commonTimeslotInfo				
>>secondInterleavingMode	frameRelated	frameRelated	frameRelated	frameRelated
>>tfci-Coding	4	4	16	16
>>puncturingLimit	1	0.92	0.52	0.88
>>repetitionPeriodAndLeng th	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL- CommonInformationPredef				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMod e	frameRelated	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	4	4	16	16
>>>puncturingLimit	1	0.92	0.52	0.92
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

Configuration	28.8 kbps conv.	32 kbps conv. CS-	64kbps conv. CS-	14.4 kbps
	CS- data +	data +	data +	streaming CS-
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling	data +
				3.4 kbps signalling

Configuration	28.8 kbps conv. CS- data +	32 kbps conv. CS- data +	64kbps conv. CS-	14.4 kbps streaming CS-
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling	data + 3.4 kbps signalling
Ref 34.108	12	14	13	15
Default configuration	4	5	6	7
identity				
RB INFORMATION				
rb-Identity	RB1: 1, RB2: 2,			
who hada Oh aina	RB3: 3, RB5: 5			
rlc-InfoChoice >ul-RLC-Mode	RIc-info RB1: UM	RIc-info RB1: UM	RIc-info RB1: UM	RIc-info RB1: UM
>ui-REC-Mode	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM
	RB5: TM	RB5: TM	RB5: TM	RB5: TM
>>transmissionRLC-	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
DiscardMode	RB2- RB3:	RB2- RB3:	RB2- RB3:	RB2- RB3:
	NoDiscard	NoDiscard	NoDiscard	NoDiscard
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>>maxDat	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 15	RB2- RB3: 15	RB2- RB3: 15	RB2- RB3: 15
>>transmissionWindowSiz	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>transmissionvvindow5i2	RB1: N/A RB2- RB3: 128 for			
6	UEs with more than			
	10 kbyte "total RLC			
	AM buffer size" and			
	32 otherwise	32 otherwise	32 otherwise	32 otherwise
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>timerRST	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>max-RST	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>max-R51	RB1: N/A RB2- RB3: 1			
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>pollingInfo	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
, peimigine	RB2- RB3: as below			
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>>lastTransmissionPDU-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A RB5: FALSE			
>dl-RLC-Mode	RB1: UM	RB1: UM	RB1: UM	RB1: UM
	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM
	RB5: TM	RB5: TM	RB5: TM	RB5: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE			
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>receivingWindowSize	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
>>10001VIIIgVVIIId0W0120	RB2- RB3: 128 for			
	UEs with more than			
	10 kbyte "total RLC			
	AM buffer size" and			
	32 otherwise	32 otherwise	32 otherwise	32 otherwise
s all DLC Ctatualists	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below			
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A
209	RB5: FALSE	RB5: FALSE	RB5: FALSE	RB5: FALSE

Configuration	28.8 kbps conv.	32 kbps conv. CS-	64kbps conv. CS-	14.4 kbps
	CS- data + 3.4 kbps signalling	data + 3.4 kbps signalling	data + 3.4 kbps signalling	streaming CS- data + 3.4 kbps signalling
>UL- LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
>>ul- TransportChannelType	Dch	Dch	Dch	Dch
>>>transportChannelIdenti ty	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A
>>rlc-SizeList	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5: N/A
>>mac- LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5: 5
>DL- logicalChannelMappingList				
>>Mapping option 1 >>>dl-	One mapping option Dch	One mapping option Dch	One mapping option Dch	One mapping option Dch
TransportChannelType >>>>transportChannelIden	RB1- RB3: 2	RB1- RB3: 2	RB1- RB3: 2	RB1- RB3: 2
tity >>>logicalChannelIdentity	RB5: 1 RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB5: 1 RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB5: 1 RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB5: 1 RB1: 1, RB2: 2, RB3: 3 RB5: N/A
TrCH INFORMATION PER TrCH	RDS. IV/A	RDS. IV/A	KDS. IV/A	KD3. IV/A
UL- AddReconfTransChInfoLis t				
> Uplink transport channel type	dch	dch	dch	dch
>transportChannelIdentity >transportFormatSet	TrCH1: 1, TrCH2: 2 DedicatedTransChT FS	TrCH1: 1, TrCH2: 2 DedicatedTransChT FS	TrCH1: 1, TrCH2: 2 DedicatedTransChT FS	TrCH1: 1, TrCH2: 2 DedicatedTransChT FS
>>dynamicTF-information	T-014. (0570	T-014 (0-040	T::014: (0::040	T-014 (0-570
>>>tf0/ tf0,1	TrCH1: (0x576, 1x576, 2x576) TrCH2: (0x144, 1x144)	TrCH1: (0x640, 1x640) TrCH2: (0x144, 1x144)	TrCH1: (0x640, 2x640) TrCH2: (0x144, 1x144)	TrCH1: (0x576, 1x576) TrCH2: (0x144, 1x144)
>>>rlcSize	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode
>>>>sizeType	TrCH1: type 2, part1= 11, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 11, part2= 2 (640) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 11, part2= 2 (640) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: Zero,1, 2 (4) TrCH2: Zero, one	TrCH1: Zero, one TrCH2: Zero, one	TrCH1: Zero, 2 (4) TrCH2: Zero, one	TrCH1: Zero, one, TrCH2: Zero, one
>>>logicalChannelList >>semiStaticTF- Information	All	All	All	All
>>>tti	TrCH1: 40 TrCH2: 40	TrCH1: 20 TrCH2: 40	TrCH1: 20 TrCH2: 40	TrCH1: 40 TrCH2: 40
>>>channelCodingType	TrCH1: Turbo TrCH2: Convolutional	TrCH1: Turbo TrCH2: Convolutional	TrCH1: Turbo TrCH2: Convolutional	TrCH1: Turbo TrCH2: Convolutional
>>>codingRate	TrCH1: N/A TrCH2: Third	TrCH1: N/A TrCH2: Third	TrCH1: N/A TrCH2: Third	TrCH1: N/A TrCH2: Third
>>>rateMatchingAttribute	TrCH1: 180 TrCH2: 160	TrCH1: 185 TrCH2: 160	TrCH1: 170 TrCH2: 160	TrCH1: 165 TrCH2: 160

Configuration	28.8 kbps conv. CS- data +	32 kbps conv. CS- data +	64kbps conv. CS- data +	14.4 kbps streaming CS-
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling	data + 3.4 kbps signalling
>>crc-Size	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16
DL- AddReconfTransChInfoLis t				
>Downlink transport channel type	dch	dch	dch	dch
>dl- TransportChannelIdentity (should be as for UL)	TrCH1: 1, TrCH2: 2			
>tfs-SignallingMode >>transportFormatSet	SameAsUL	SameAsUL	SameAsUL	SameAsUL
>>>dynamicTF-information >>>>tf0/ tf0,1				
>>>rlcSize >>>>sizeType				
>>>numberOfTbSizeList >>>>logicalChannelList				
>>ULTrCH-Id >dch-QualityTarget	TrCH1: 1, TrCH2: 2			
>>bler-QualityValue	TrCH1: 2x10 ⁻³ TrCH2: Absent	TrCH1: 2x10 ⁻³ TrCH2: Absent	TrCH1: 2x10 ⁻³ TrCH2: Absent	TrCH1: 1x10 ⁻² TrCH2: Absent
TrCH INFORMATION, COMMON				
ul-CommonTransChInfo	4	4	4	4
>tfcs-ID (TDD only) >sharedChannelIndicator	1 FALSE	1 FALSE	1 FALSE	1 FALSE
(TDD only)	TALOL	TALOE	TALOL	TALOE
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling
>>explicitTFCS- ConfigurationMode	Complete	Complete	Complete	Complete
>>>ctfcSize	Ctfc2Bit	Ctfc2Bit	Ctfc2Bit	Ctfc4Bit
>>>>TFCS representation	Addition	Addition	Addition	Addition
>>>>TFCS list	(TF0, TF0)	(TF0, TF0)	(TF0, TF0)	(TF0, TF0)
>>>>>ctfc	0	0	0	0
>>>>>gainFactorInform	Computed	Computed	Computed	Computed
>>>>>referenceTFCld	0	0	0	0
>>>>TFCS 2	(TF1, TF0)	(TF1, TF0)	(TF1, TF0)	(TF1, TF0)
>>>>>ctfc >>>>>gainFactorInform ation	1 Computed	Computed	1 Computed	Computed
>>>>>>βc (FDD only)	N/A	N/A	N/A	N/A
>>>>>βd	N/A	N/A	N/A	N/A
>>>>>referenceTFCld	0	0	0	0
>>>>TFCS 3	(TF2, TF0)	(TF0, TF1)	(TF0, TF1)	(TF0, TF1)
>>>>>ctfc >>>>>gainFactorInform	2 Computed	2 Computed	2 Computed	2 Computed
ation >>>>>referenceTFCId	0	0	0	0
>>>>TFCS 4	(TF0, TF1)	(TF1, TF1)	(TF1, TF1)	(TF1, TF1)
>>>>>ctfc	3	3	3	3
>>>>>gainFactorInform ation	Computed	Signalled	Signalled	Signalled
>>>>>βc (FDD only)	N/A	8	8	11
>>>>>βd	N/A	15	15	15
>>>>>referenceTFCId	0	0	0	0

Configuration	28.8 kbps conv.	32 kbps conv. CS-	64kbps conv. CS-	14.4 kbps
	CS- data + 3.4 kbps signalling	data + 3.4 kbps signalling	data + 3.4 kbps signalling	streaming CS- data + 3.4 kbps signalling
>>>>TFCS 5	(TF1, TF1)	N/A	N/A	orr mape organismig
>>>>>ctfc	4			
>>>>>gainFactorInform ation	Computed			
>>>>>>referenceTFCId	0			
>>>>TFCS 6	(TF2, TF1)	N/A	N/A	
>>>>>ctfc	5			
>>>>>gainFactorInform ation	Signalled			
>>>>>βc (FDD only)	8			
>>>>>βd	15			
>>>>>>referenceTFCld	0			
>>>>TFCS 7				
>>>>>ctfc				
>>>>>gainFactorInform ation				
>>>>>referenceTFCld				
>>>>TFCS 8				
>>>>>ctfc				
>>>>>gainFactorInform				
ation				
>>>>>>referenceTFCld				
>>>>TFCS 9				
>>>>>ctfc				
>>>>>gainFactorInform				
ation				
>>>>>referenceTFCId				
>>>>>trc5 10				
>>>>>>sciic				
ation				
>>>>>βc (FDD only)				
>>>>>βd				
>>>>>>referenceTFCld				
dl-CommonTransChInfo				
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION FDD				
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo				
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize	1	1	1	1
>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>puncturingLimit	0.92	0.8	0.92	1
DL- CommonInformationPrede				
f >dl-DPCH-InfoCommon				
>>spreadingFactor	64	64	32	128
>>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>>pilotBits	8	8	8	8
>>positionFixed	Flexible	Flexible	Flexible	Flexible
PhyCH INFORMATION TDD				
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo				
>>dpch-ConstantValue	0	0	0	0
•				

Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS- data + 3.4 kbps signalling	64kbps conv. CS- data + 3.4 kbps signalling	14.4 kbps streaming CS- data + 3.4 kbps signalling
>commonTimeslotInfo				
>>secondInterleavingMod	frameRelated	frameRelated	frameRelated	frameRelated
е				
>>tfci-Coding	16	8	8	8
>>puncturingLimit	0.44	0.8	0.56	0.8
>>repetitionPeriodAndLen gth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL- CommonInformationPrede f				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>secondInterleavingMo de	frameRelated	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	16	8	8	8
>>>puncturingLimit	0.44	0.64	0.56	0.8
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

Configuration	28.8 kbps	57.6 kbps	12.2 kbps
	streaming CS-	streaming CS-	speech(multimode
	data +	data +) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
Ref 34.108	16	17	4a
Default configuration	8	9	10
identity			
RB INFORMATION			
rb-Identity	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
	RB3: 3, RB5: 5	RB3: 3, RB5: 5	RB3: 3, RB5: 5,
			RB6: 6, RB7: 7
rlc-InfoChoice	RIc-info	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM	RB1: UM	RB1: UM
	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM
	RB5: TM	RB5: TM	RB5-RB7: TM
>>transmissionRLC-	RB1: N/A	RB1: N/A	RB1: N/A
DiscardMode	RB2- RB3:	RB2- RB3:	RB2- RB3:
	NoDiscard	NoDiscard	NoDiscard
	RB5: N/A	RB5: N/A	RB5- RB7: N/A
>>>maxDat	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 15	RB2- RB3: 15	RB2- RB3: 15
	RB5: N/A	RB5: N/A	RB5- RB7: N/A
>>transmissionWindowSiz	RB1: N/A	RB1: N/A	RB1: N/A
е	RB2- RB3: 128 for	RB2- RB3: 128 for	RB2- RB3: 128 for
	UEs with more than	UEs with more than	UEs with more than
	10 kbyte "total RLC	10 kbyte "total RLC	10 kbyte "total RLC
	AM buffer size" and	AM buffer size" and	AM buffer size" and
	32 otherwise	32 otherwise	32 otherwise
	RB5: N/A	RB5: N/A	RB5- RB7: N/A
>>timerRST	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
	RB5: N/A	RB5: N/A	RB5- RB7: N/A
>>max-RST	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 1	RB2- RB3: 1	RB2- RB3: 1
	RB5: N/A	RB5: N/A	RB5- RB7: N/A
>>pollingInfo	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: as below	RB2- RB3: as below	RB2- RB3: as below
	RB5: N/A	RB5: N/A	RB5- RB7: N/A
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE

Configuration	28.8 kbps streaming CS- data +	57.6 kbps streaming CS- data +	12.2 kbps speech(multimode) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A
	RB5: FALSE	RB5: FALSE	RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM	RB1: UM	RB1: UM
	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM
in Cany an an Daliyamy	RB5: TM	RB5: TM	RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE	RB1: N/A RB2- RB3: TRUE	RB1: N/A RB2- RB3: TRUE
	RB5: N/A	RB5: N/A	RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 128 <u>for</u>	RB2- RB3: 128 <u>for</u>	RB2- RB3: 128 <u>for</u>
	UEs with more than	UEs with more than	UEs with more than
	10 kbyte "total RLC	10 kbyte "total RLC	10 kbyte "total RLC
	AM buffer size" and 32 otherwise	AM buffer size" and 32 otherwise	AM buffer size" and 32 otherwise
	RB5: N/A	RB5: N/A	RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: as below	RB2- RB3: as below	RB2- RB3: as below
	RB5: N/A	RB5: N/A	RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
rb-MappingInfo	NDS. I ALOL	NDS. I ALOL	NDS- NDT. I ALOL
>UL-	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
LogicalChannelMappings	3		3
>>ul-	Dch	Dch	Dch
TransportChannelType	55. 55.	55. 55.	55. 55.
>>>transportChannelIdenti	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 4 RB5: 1, RB6: 2,
ty	KDO. I	KDO. I	RB7: 3
>>logicalChannelIdentity	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
a second	RB3: 3	RB3: 3	RB3: 3
	RB5: N/A	RB5: N/A	RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3:	RB1- RB3:	RB1- RB3:
	configured	configured	configured
>>mac-	RB5: N/A RB1: 1, RB2: 2,	RB5: N/A RB1: 1, RB2: 2,	RB5- RB7: N/A RB1: 1, RB2: 2,
LogicalChannelPriority	RB3: 3	RB3: 3	RB3: 3
	RB5: 5	RB5: 5	RB5- RB7: 5
>DL-			
IogicalChannelMappingList			
>>Mapping option 1	One mapping option	One mapping option	One mapping option
>>>dl- TransportChannelType	Dch	Dch	Dch
>>>transportChannellden	RB1- RB3: 2	RB1- RB3: 2	RB1- RB3: 4
tity	RB5: 1	RB5: 1	RB5: 1, RB6: 2,
			RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
	RB3: 3	RB3: 3	RB3: 3
TrCH INFORMATION PER	RB5: N/A	RB5: N/A	RB5- RB7: N/A
TrCH INFORMATION PER			
UL-			
AddReconfTransChInfoLis			
>Uplink transport channel	dch	dch	dch
type	4011	4011	4011
>transportChannelIdentity	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2,
			TrCH3: 3, TrCH4: 4

Configuration	28.8 kbps streaming CS- data +	57.6 kbps streaming CS- data +	12.2 kbps speech(multimode) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>transportFormatSet	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
>>dynamicTF-information			
>>>tf0/ tf0,1	TrCH1: (0x576, 1x576, 2x576) TrCH2: (0x144, 1x144)	TrCH1: (0x576, 1x576, 2x576, 3x576, 4x576) TrCH2: (0x144, 1x144)	TrCH1: (0x81) TrCH2: (0x 103 TrCH3: (0x 60) TrCH4: (0x144)
>>>rlcSize	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode	BitMode
>>>>sizeType	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 81 TrCH2: type 1: 103 TrCH3: type 1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: Zero, one, 2 TrCH2: Zero, one	TrCH1: Zero, one, 2, 3, 4 TrCH2: Zero, one	TrCH1-4: Zero
>>>logicalChannelList	All	All	All
>>>tf 1			TrCH1: (1x39) TrCH2: (1x53) TrCH3: (1x60) TrCH4: (1x144)
>>>numberOfTransportBl ocks			TrCH1-3: One
>>>rlc-Size			TrCH1-3: BitMode
>>>>sizeType			TrCH1: 1: 39 TrCH2: 1: 53 TrCH3: 1: 60
>>>numberOfTbSizeList			TrCH1-3: One
>>>>logicalChannelList			TrCH1-3: all
>>>tf 2			TrCH1: (1x42) TrCH2: (1x63) TrCH3- TrCH4: N/A
>>>numberOfTransportBl ocks			TrCH1-2: One
>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 42 TrCH2: type 1: 63
>>>>numberOfTbSizeList			TrCH1-2: One TrCH1: all
>>>logicalChannelList >>>tf 3			TrCH1: aii TrCH1: (1x55) TrCH2: (1x84) TrCH3- TrCH4: N/A
>>>numberOfTransportBl ocks			TrCH1-2: Zero
>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 55 TrCH2: type 1: 84
>>>numberOfTbSizeList			TrCH1-2: One
>>>>logicalChannelList			TrCH1: all
>>>tf 4			TrCH1: (1x75) TrCH2: (1x103) TrCH3- TrCH4: N/A
>>>numberOfTransportBl ocks			TrCH1-2: One
>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 75 TrCH2: type 1: 103
>>>numberOfTbSizeList >>>>logicalChannelList			TrCH1-2: One TrCH1: all

Configuration	28.8 kbps streaming CS-	57.6 kbps streaming CS-	12.2 kbps speech(multimode
	data +	data +) +
>>>tf 5	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling TrCH1: (1x81)
777110			TrCH2- TrCH4: N/A
>>>numberOfTransportBl ocks			TrCH1: One
>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 81
>>>>numberOfTbSizeList			TrCH1: One
>>>logicalChannelList >>semiStaticTF-			TrCH1: all
Information			
>>>tti	TrCH1: 40 TrCH2: 40	TrCH1: 40 TrCH2: 40	TrCH1- TrCH3: 20 TrCH4: 40
>>>channelCodingType	TrCH1: Turbo	TrCH1: Turbo	Convolutional
222 Gridi Morodding Typo	TrCH2: Convolutional	TrCH2: Convolutional	Convolutional
>>>codingRate	TrCH1: N/A	TrCH1: N/A	TrCH1- TrCH2:
	TrCH2: Third	TrCH2: Third	Third TrCH3: Half TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 155	TrCH1: 145	TrCH1: 200
G	TrCH2: 160	TrCH2: 160	TrCH2: 190 TrCH3: 235 TrCH4: 160
>>>crc-Size	TrCH1: 16	TrCH1: 16	TrCH1: 12
	TrCH2: 16	TrCH2: 16	TrCH2- TrCH3: 0 TrCH4: 16
DL- AddReconfTransChInfoLis t			
>Downlink transport channel type	dch	dch	dch
>dl- TransportChannelIdentity (should be as for UL)	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>tfs-SignallingMode	SameAsUL	SameAsUL	Independent <only and="" below="" different="" is="" on="" shown="" tf0="" trch1=""></only>
>>transportFormatSet			DedicatedTransChT FS
>>>dynamicTF-information			T::OLIA: (4::O)
>>>tf0/ tf0,1 >>>>rlcSize			TrCH1: (1x0) bitMode
>>>>sizeType	<u> </u>		TrCH1: type 1: 0
>>>numberOfTbSizeList			TrCH1: One
>>>logicalChannelList			All
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>dch-QualityTarget		_	•
>>bler-QualityValue	TrCH1: 1x10 ⁻² TrCH2: Absent	TrCH1: 1x10 ⁻² TrCH2: Absent	TrCH1: 7x10 ⁻³ TrCH2- TrCH4: Absent
TrCH INFORMATION, COMMON			
ul-CommonTransChInfo			
>tfcs-ID (TDD only)	1	1	1
>sharedChannelIndicator	FALSE	FALSE	FALSE
(TDD only)	Absent, not required	Absent, not required	Absent, not required
>tfc-Subset >ul-TFCS	Normal TFCI	Normal TFCI	Normal TFCI

Configuration	28.8 kbps streaming CS- data +	57.6 kbps streaming CS- data +	12.2 kbps speech(multimode) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>explicitTFCS- ConfigurationMode	Complete	Complete	Complete
>>>ctfcSize	Ctfc4Bit	Ctfc4Bit	Ctfc8Bit
>>>TFCS representation	Addition	Addition	Addition
>>>>TFCS list			
>>>>TFCS 1	(TF0, TF0)	(TF0, TF0)	(TF0, TF0, TF0, TF0)
>>>>>ctfc	0	0	0
>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>referenceTFCld	0	0	0
>>>>>TFCS 2	(TF1, TF0)	(TF1, TF0)	(TF1, TF0, TF0, TF0)
>>>>>ctfc	1	1	1
>>>>> sgainFactorInform ation	Computed	Computed	Computed
>>>>>βc (FDD only)	N/A	N/A	N/A
>>>>>βd	N/A	N/A	N/A
>>>>>referenceTFCId	0	0	0
>>>>>TFCS 3	(TF2, TF0)	(TF2, TF0)	(TF2, TF1, TF0, TF0)
>>>>>ctfc	2	2	8
>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>referenceTFCld	0	0	0
>>>>TFCS 4	(TF0, TF1)	(TF3, TF0)	(TF3, TF2, TF0, TF0)
>>>>>ctfc	3	3	15
>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>>βc (FDD only)	N/A	N/A	N/A
>>>>>βd	N/A	N/A	N/A
>>>>>referenceTFCld	0	0	0
>>>>>TFCS 5	(TF1, TF1)	(TF4, TF0)	(TF4, TF3, TF0, TF0)
>>>>>ctfc	4	4	22
>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>>referenceTFCld	(TEO TEA)	(750, 754)	0 (TES TEA TEA
>>>>TFCS 6	(TF2, TF1)	(TF0, TF1)	(TF5, TF4, TF1, TF0)
>>>>>Ctfc	5 Cianallad	5 Commuted	59
>>>>>gainFactorInform ation	Signalled	Computed	Computed
>>>>>βc (FDD only)	8	N/A	N/A
>>>>>βd	15	N/A	N/A
>>>>>referenceTFCld	0	0	0
>>>>TFCS 7		(TF1, TF1)	(TF0,TF0,TF1)
>>>>>ctfc >>>>>gainFactorInform		6 Computed	60 Computed
ation		·	·
>>>>>referenceTFCld		(TE2 TE1)	(TE1 TE0 TE0 TE1)
>>>>>TFCS 8		(TF2, TF1) 7	(TF1,TF0,TF0,TF1) 61
>>>>>scilc		Computed	Computed
ation		·	·
>>>>>referenceTFCId		(TEO. TEA)	(TEO TEA TEO TEA)
>>>>TFCS 9		(TF3, TF1)	(TF2,TF1,TF0,TF1)
>>>>>ctfc		8	68

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Configuration	28.8 kbps streaming CS- data +	57.6 kbps streaming CS- data +	12.2 kbps speech(multimode) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>>>>gainFactorInform		Computed	Computed
ation			
>>>>>referenceTFCId		0	(TEQ TEQ TEQ (
>>>>TFCS 10		(TF4, TF1)	(TF3,TF2,TF0,TF1)
>>>>>CtfC		9 Signallad	75 Computed
>>>>>gainFactorInform ation		Signalled	Computed
>>>>>βc (FDD only)		8	N/A
>>>>>βd		15	N/A
>>>>>referenceTFCId		0	0
>>>>TFCS 11			(TF4,TF3,TF0,TF1)
>>>>>ctfc			82
>>>>>gainFactorInform			Computed
ation			
>>>>>referenceTFCId			0
>>>>TFCS 12			(TF5,TF4,TF1,TF1)
>>>>>CtfC			119 Signallad
>>>>>gainFactorInform ation			Signalled
>>>>>βc (FDD only)			11
>>>>>βd			15
>>>>>referenceTFCId			0
dl-CommonTransChInfo			
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION FDD			
UL-DPCH-InfoPredef			
>ul-DPCH-			
PowerControlInfo			
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize	1	1	1
>tfci-Existence	TRUE	TRUE	TRUE
>puncturingLimit	1	1	0.88
CommonInformationPrede			
>dl-DPCH-InfoCommon			
>>spreadingFactor	64	32	128
>>tfci-Existence	TRUE	TRUE	FALSE
>>pilotBits	8	8	4
>>positionFixed	Flexible	Flexible	Fixed
PhyCH INFORMATION TDD			
UL-DPCH-InfoPredef			
>ul-DPCH-			
PowerControlInfo			
>>dpch-ConstantValue	0	0	0
>commonTimeslotInfo	fram D. I. ()	form D. I. ()	forma D. I. (.)
>>secondInterleavingMod	frameRelated	frameRelated	frameRelated
e >>tfci-Coding	16	16	16
>>puncturingLimit	0.44	0.48	0.88
>>repetitionPeriodAndLen	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
gth DL-	ropoulierii diladi	Topoulion oned	ropoulioni onog i
CommonInformationPrede			
>dl-DPCH-InfoCommon			
>>commonTimeslotInfo			
	1	l .	

Configuration	28.8 kbps streaming CS- data + 3.4 kbps signalling	57.6 kbps streaming CS- data + 3.4 kbps signalling	12.2 kbps speech(multimode) + 3.4 kbps signalling	
>>>secondInterleavingMo de	frameRelated	frameRelated	frameRelated	
>>>tfci-Coding	16	16	16	
>>>puncturingLimit	0.44	0.48	0.92	
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	

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<u> </u>										CR-Form-v7
CHANGE REQUEST										
*	25	.331	CR 1	765	жrev	-	ж с	Current vers	ion: 4.7.	0 #
For <u>HELP</u> on t	using	this for	m, see bo	ottom of thi	s page or	look a	at the p	pop-up text	over the 器:	symbols.
Proposed change	affec	e ts: (JICC app	s# 🔃	ME X	Radi	io Acc	ess Networ	k <mark>X</mark> Core	Network
Title: #	RL	C wind	low size i	n default co	onfiguratio	ns				
Source: #	Eri	csson								
Work item code: ₩	TE	I						Date: ♯	15 Novem	ber 2002
Category: #	Use Deta be fo	F (con. A (con. B (add. C (fun. D (edi. ailed expound in.	rection) responds to dition of feactional modio blanations 3GPP TR	dification of fication) of the above 21.900.	feature) e categorie	s can	lease)	2 R96 R97 R98 R99 Rel-4 Rel-5 Rel-6	Rel-4 the following (GSM Phase (Release 199 (Release 199 (Release 199 (Release 4) (Release 5) (Release 6)	2) 96) 97) 98) 99)
		The comemon kbyte To so 128 to	urrent RL ory. For lo memory i lve the ab o 32 for Sl	C windows we end UEs s insufficie love proble RB2 and S	sizes of 12 with 10kl nt to setup m it is pro RB3 in the	28 on to oyte R o SRB oposed	the SF LC bu 34 and d to lov ult cor	offer memor a PS RAB. wer the RLC onfigurations	8 kbyte of F y, the remai	ning 2 res from h 10 kbyte
Summary of chan	ge: ₩								om 128 to 3 handover fr	
Consequences if not approved:	#	mem	ory will b	e limited. H	landover f	rom G	SSM is		th 10kbyte Fout a subsequence.	
Clauses affected:	ж	13.7								
Other specs affected:	ж	Y N X X	Test spe	ore specific ecifications pecifications		¥				

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How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked \(\mathcal{H} \) contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

13.7 Parameter values for default radio configurations

The UE shall support the use of the default radio configurations that are specified in the following.

NOTE 1: These configurations are based on [41] and cover a number of RAB and signalling connection configurations.

In the table that is used to specify the parameter values for these default configurations, the following principles are used:

- Optional IEs that are not used are omitted;
- In case no parameter value is specified in a column, this means the value given the previous (left side) column applies.
- NOTE 2: If needed, signalling radio bearer RB4 is established after the completion of handover.
- NOTE 3: For each default configuration, the value of FDD, 3.84 Mcps TDD and 1.28 Mcps TDD parameters are specified. All parameters apply to FDD, 3.84 Mcps TDD and 1.28 Mcps TDD modes, unless explicitly stated otherwise. It should be noted that in this respect default configurations differ from pre-defined configurations, which only include parameter values for one mode.
- NOTE 4: The transport format sizes, indicated in the following table, concern the RLC PDU size, since all configurations concern dedicated channels. The transport block sizes indicated in TS 34.108 are different since these include the size of the MAC header.

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech + 3.4 kbps signalling	12.2 kbps speech + 3.4 kbps signalling
Ref 34.108	2	3	6	4
Default configuration identity	0	1	2	3
RB INFORMATION				
rb-Identity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	RIc-info	RIc-info	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM RB5-RB6: TM	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3: NoDiscard	RB1: N/A RB2- RB3: NoDiscard	RB1: N/A RB2- RB3: NoDiscard RB5- RB6: N/A	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15 RB5- RB6: N/A	RB1: N/A RB2- RB3: 15 RB5- RB7: N/A
>>transmissionWindowSiz e	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB6: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300 RB5- RB6: N/A	RB1: N/A RB2- RB3: 300 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1	RB1: N/A RB2- RB3: 1	RB1: N/A RB2- RB3: 1 RB5- RB6: N/A	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below RB5- RB6: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A

Configuration	3.4 kbps signalling	13.6 kbps	7.95 kbps speech	12.2 kbps speech
		signalling	3.4 kbps signalling	3.4 kbps signalling
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 100	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A RB5- RB6: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM RB5- RB6: TM	RB1: UM RB2- RB3: AM RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE	RB1: N/A RB2- RB3: TRUE	RB1: N/A RB2- RB3: TRUE RB5- RB6: N/A	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB6: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below RB5- RB6: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 100	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A RB5- RB6: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
rb-MappingInfo				
>UL- LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
>>ul- TransportChannelType	Dch	Dch	Dch	Dch
>>>transportChannelIdentit y	RB1- RB3: 1	RB1- RB3: 1	RB1- RB3: 3 RB5: 1, RB6: 2	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured	RB1- RB3: configured	RB1- RB3: configured RB5- RB6: N/A	RB1- RB3: configured RB5- RB7: N/A
>>mac- LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: 5	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL- logicalChannelMappingList				
>>Mapping option 1	One mapping option	One mapping option	One mapping option	One mapping option
>>>dl- TransportChannelType	Dch	Dch	Dch	Dch
>>>transportChannellden tity	RB1- RB3: 1	RB1- RB3: 1	RB1- RB3: 3 RB5: 1, RB6: 2	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH				
UL- AddReconfTransChInfoList				
>Uplink transport channel type	dch	dch	dch	dch

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech	12.2 kbps speech
		Signaming	3.4 kbps signalling	3.4 kbps signalling
>transportChannelIdentity	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>transportFormatSet	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
>>dynamicTF-information				
>>>tf0/ tf0,1	TrCH1: (0x144, 1x144)	TrCH1: (0x144, 1x144)	TrCH1: (0x75) TrCH2: (0x 84 1x84) TrCH3: (0x144, 1x144)	TrCH1: (0x81) TrCH2: (0x 103, 1x103) TrCH3: (0x 60, 1x60) TrCH4: (0x144, 1x144)
>>>rlcSize	BitMode	BitMode	BitMode	BitMode
>>>>sizeType	TrCH1: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 75 TrCH2: type 1: 84 TrCH3: 2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 81 TrCH2: type 1: 103 TrCH3: type 1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>numberOfTbSizeList	TrCH1: Zero, one	TrCH1: Zero, one	TrCH1: Zero TrCH2-3: Zero, one	TrCH1: Zero TrCH2-4: Zero, one
>>>>logicalChannelList	All	All	All	All
>>>tf 1	N/A	N/A	TrCH1: (1x39) TrCH2- TrCH4: N/A	TrCH1: (1x39) TrCH2- TrCH4: N/A
>>>numberOfTransportBl ocks			TrCH1: One	TrCH1: One
>>>rlc-Size			TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType			TrCH1: 1: 39	TrCH1: 1: 39
>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>>logicalChannelList			TrCH1: all	TrCH1: all
>>>tf 2	N/A	N/A	TrCH1: (1x75) TrCH2- TrCH3: N/A	TrCH1: (1x81) TrCH2- TrCH4: N/A
>>>numberOfTransportBl ocks			TrCH1: Zero	TrCH1: Zero
>>>rlc-Size			TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 75	TrCH1: type 1: 81
>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>logicalChannelList			TrCH1: all	TrCH1: all
>>semistaticTF-Information				
>>>tti	TrCH1: 40	TrCH1: 10	TrCH1- TrCH2: 20 TrCH3: 40	TrCH1- TrCH3: 20 TrCH4: 40
>>>channelCodingType	Convolutional	Convolutional	Convolutional	Convolutional
>>>>codingRate	TrCH1: Third	TrCH1: Third	TrCH1- TrCH2: Third TrCH3: Third	TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 160	TrCH1: 160	TrCH1: 200 TrCH2: 190 TrCH3: 160	TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160
>>>crc-Size	TrCH1: 16	TrCH1: 16	TrCH1: 12 TrCH2: 0 TrCH3: 16	TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16
DL- AddReconfTransChInfoList				
>Downlink transport channel type	dch	dch	dch	dch
>dl- TransportChannelldentity (should be as for UL)	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech	12.2 kbps speech
		Signaming	3.4 kbps signalling	3.4 kbps signalling
>tfs-SignallingMode	SameAsUL	SameAsUL	Explicit <only and="" below="" different="" is="" on="" shown="" tf0="" trch1=""></only>	Explicit <only and="" below="" different="" is="" on="" shown="" tf0="" trch1=""></only>
>>transportFormatSet			DedicatedTransChT FS	DedicatedTransChT FS
>>>dynamicTF-information				
>>>tf0/ tf0,1			TrCH1: (1x0)	TrCH1: (1x0)
>>>rlcSize			BitMode	bitMode
>>>>sizeType			TrCH1: type 1: 0	TrCH1: type 1: 0
>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>>logicalChannelList	T 0114 4	T 0114 4	All	All
>>ULTrCH-Id	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>dch-QualityTarget		_		_
>>bler-QualityValue	TrCH1: 5x10 ⁻²	TrCH1: 5x10 ⁻²	TrCH1: 7x10 ⁻³ TrCH2- TrCH3: Absent	TrCH1: 7x10 ⁻³ TrCH2- TrCH4: Absent
TrCH INFORMATION, COMMON				
ul-CommonTransChInfo				
>tfcs-ID (TDD only)	1	1	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE	FALSE
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling
>>explicitTFCS-	Complete	Complete	Complete	Complete
ConfigurationMode	,	F	F	r
>>>ctfcSize	Ctfc2Bit	Ctfc2Bit	Ctfc4Bit	Ctfc6Bit
>>>>TFCS representation	Addition	Addition	Addition	Addition
>>>>TFCS list				
>>>>TFCS 1	(TF0)	(TF0)	(TF0, TF0, TF0)	(TF0, TF0, TF0, TF0)
>>>>>ctfc	0	0	0	0
>>>>> gainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>>referenceTFCId	0	0	0	0
>>>>TFCS 2	(TF1)	(TF1)	(TF1, TF0, TF0)	(TF1, TF0, TF0, TF0)
>>>>>ctfc	1	1	1	1
>>>>>gainFactorInform ation	Signalled	Signalled	Computed	Computed
>>>>>βc (FDD only)	11	11	N/A	N/A
>>>>>βd	15	15	N/A	N/A
>>>>>referenceTFCId	0	0	0	0
>>>>TFCS 3			(TF2, TF1, TF0)	(TF2, TF1, TF1, TF0)
>>>>>ctfc			5	11
>>>>>gainFactorInform			Computed	Computed
>>>>>>referenceTFCId			0	0
>>>>TFCS 4			(TF0, TF0, TF1)	(TF0, TF0, TF0, TF1)
>>>>>ctfc			6	12
>>>>>gainFactorInform			Computed	Computed
ation			Joinpalou	Joinpalou
>>>>>βc (FDD only)			N/A	N/A
>>>>>βd			N/A	N/A
>>>>>>referenceTFCId			0	0

Configuration	3.4 kbps signalling	13.6 kbps	7.95 kbps speech	12.2 kbps speech
		signalling	3.4 kbps signalling	+ 3.4 kbps signalling
>>>>TFCS 5			(TF1, TF0, TF1)	(TF1, TF0, TF0, TF1)
>>>>>ctfc			7	13
>>>>>gainFactorInform ation			Computed	Computed
>>>>>>referenceTFCId			0	0
>>>>TFCS 6			(TF2, TF1, TF1)	(TF2, TF1, TF1, TF1)
>>>>>ctfc			11	23
>>>>>gainFactorInform ation			Signalled	Signalled
>>>>>βc (FDD only)			11 15	11 15
>>>>>βd				
>>>>>>referenceTFCId			0	0
dl-CommonTransChInfo	Same as UL	Same as UL	Same as UL	Same as UL
>tfcs-SignallingMode PhyCH INFORMATION FDD	Same as OL	Same as UL	Same as UL	Same as OL
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo	A1 '41 4	A1 '41 4	A1 141 4	A1 24 4
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize >tfci-Existence	1 TRUE	TRUE	TRUE	TRUE
>puncturingLimit	1	1	1	0.88
DL-	I			0.00
CommonInformationPredef				
>dl-DPCH-InfoCommon				
>>spreadingFactor	256	128	128	128
>>tfci-Existence	FALSE	FALSE	FALSE	FALSE
>>pilotBits	4	4	4	4
>>positionFixed	N/A	N/A	Fixed	Fixed
PhyCH INFORMATION				
3.84 Mcps TDD UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo				
>>dpch-ConstantValue	0	0	0	0
>commonTimeslotInfo				
>>secondInterleavingMode	frameRelated	frameRelated	frameRelated	frameRelated
>>tfci-Coding	4	4	16	16
>>puncturingLimit	1	0.92	0.52	0.88
>>repetitionPeriodAndLeng th	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL-				
CommonInformationPredef >dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMod e	frameRelated	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	4	4	16	16
>>>puncturingLimit	1	0.92	0.52	0.92
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
PhyCH INFORMATION				
1.28 Mcps TDD				
UL-DPCH-InfoPredef				
>commonTimeslotInfo	(5			(5
>>secondInterleavingMode	frameRelated	frameRelated	frameRelated	frameRelated
>>tfci-Coding	4	4	16	16

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech +	12.2 kbps speech +
			3.4 kbps signalling	3.4 kbps signalling
>>puncturingLimit	1	0.64	0.80	0.60
>>repetitionPeriodAndLeng th	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL- CommonInformationPredef				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMod	frameRelated	frameRelated	frameRelated	frameRelated
е				
>>>tfci-Coding	4	4	16	16
>>>puncturingLimit	1	0.64	0.80	0.60
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS- data + 3.4 kbps signalling	64kbps conv. CS- data + 3.4 kbps signalling	14.4 kbps streaming CS- data + 3.4 kbps signalling
Ref 34.108	12	14	13	15
Default configuration	4	5	6	7
identity				
RB INFORMATION				
rb-Identity	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
	RB3: 3, RB5: 5	RB3: 3, RB5: 5	RB3: 3, RB5: 5	RB3: 3, RB5: 5
rlc-InfoChoice	RIc-info	RIc-info	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM	RB1: UM	RB1: UM	RB1: UM
	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM
	RB5: TM	RB5: TM	RB5: TM	RB5: TM
>>transmissionRLC-	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
DiscardMode	RB2- RB3:	RB2- RB3:	RB2- RB3:	RB2- RB3:
	NoDiscard	NoDiscard	NoDiscard	NoDiscard
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>>maxDat	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 15	RB2- RB3: 15	RB2- RB3: 15	RB2- RB3: 15
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>transmissionWindowSiz	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
е	RB2- RB3: 128 for	RB2- RB3: 128 for	RB2- RB3: 128 for	RB2- RB3: 128 for
	UEs with more than	UEs with more than	UEs with more than	UEs with more than
	10 kbyte "total RLC	10 kbyte "total RLC	10 kbyte "total RLC	10 kbyte "total RLC
	AM buffer size" and	AM buffer size" and	AM buffer size" and	AM buffer size" and
	32 otherwise	32 otherwise	32 otherwise	32 otherwise
Aire a rDCT	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>timerRST	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>max-RST	RB5: N/A RB1: N/A	RB5: N/A RB1: N/A	RB5: N/A RB1: N/A	RB5: N/A RB1: N/A
>>IIIax-R51	RB1: N/A RB2- RB3: 1	RB2- RB3: 1	RB2- RB3: 1	RB2- RB3: 1
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>pollingInfo	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
>>poininginio	RB2- RB3: as below	RB2- RB3: as below	RB2- RB3: as below	RB2- RB3: as below
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>>lastTransmissionPDU-	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
Poll	NDZ- NDS. I ALOL	ND2- ND3. I ALGE	NDZ- NDO. I ALOL	NDZ- NDS. I ALOL
>>>lastRetransmissionPD	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
U-Poll				
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A
	RB5: FALSE	RB5: FALSE	RB5: FALSE	RB5: FALSE
>dI-RLC-Mode	RB1: UM	RB1: UM	RB1: UM	RB1: UM
	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM
	RB5: TM	RB5: TM	RB5: TM	RB5: TM

Configuration	28.8 kbps conv.	32 kbps conv. CS-	64kbps conv. CS-	14.4 kbps
	CS- data +	data +	data +	streaming CS-
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling	data + 3.4 kbps signalling
>>inSequenceDelivery	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: TRUE	RB2- RB3: TRUE	RB2- RB3: TRUE	RB2- RB3: TRUE
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128 for			
	UEs with more than			
	10 kbyte "total RLC			
	AM buffer size" and			
	32 otherwise RB5: N/A	32 otherwise RB5: N/A	32 otherwise RB5: N/A	32 otherwise RB5: N/A
>>dl-RLC-StatusInfo	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
ZZG NEO Otatasimo	RB2- RB3: as below			
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic >>segmentationIndication	RB2- RB3: 300 RB1- RB3: N/A			
>>>eymentationinulcation	RB5: FALSE	RB5: FALSE	RB5: FALSE	RB5: FALSE
rb-MappingInfo				
>UL-	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
LogicalChannelMappings				
>>ul-	Dch	Dch	Dch	Dch
TransportChannelType >>>transportChannelIdenti	RB1- RB3: 2	RB1- RB3: 2	RB1- RB3: 2	RB1- RB3: 2
ty	RB5: 1	RB5: 1	RB5: 1	RB5: 1
>>logicalChannelIdentity	RB1: 1, RB2: 2,			
	RB3: 3	RB3: 3	RB3: 3	RB3: 3
>>rlc-SizeList	RB5: N/A RB1- RB3:	RB5: N/A	RB5: N/A RB1- RB3:	RB5: N/A RB1- RB3:
>>IIC-SizeList	configured	RB1- RB3: configured	configured	configured
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>mac-	RB1: 1, RB2: 2,			
LogicalChannelPriority	RB3: 3	RB3: 3	RB3: 3	RB3: 3
>DL-	RB5: 5	RB5: 5	RB5: 5	RB5: 5
logicalChannelMappingList				
>>Mapping option 1	One mapping option	One mapping option	One mapping option	One mapping option
>>>dl-	Dch	Dch	Dch	Dch
TransportChannelType	DD4 DD0 0	DD4 DD0 0	BB4 BB0 0	DD4 DD0 0
>>>transportChannelIden tity	RB1- RB3: 2 RB5: 1			
>>>logicalChannelIdentity	RB1: 1, RB2: 2,			
in gram a manifest and	RB3: 3	RB3: 3	RB3: 3	RB3: 3
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
TrCH INFORMATION PER				
TrCH UL-				
AddReconfTransChInfoLis				
t				
>Uplink transport channel	dch	dch	dch	dch
type	T*OU4.4 T*OU0.0	TrOU4. 4. TrOUG. 0	T*OU4, 4 T*OU0. 0	TrOU4.4 TrOUG.0
>transportChannelIdentity >transportFormatSet	TrCH1: 1, TrCH2: 2 DedicatedTransChT			
- danoporti officiolot	FS	FS	FS	FS
>>dynamicTF-information				
>>>tf0/ tf0,1	TrCH1: (0x576,	TrCH1: (0x640,	TrCH1: (0x640,	TrCH1: (0x576,
	1x576, 2x576)	1x640) TrCH2: (0x144,	2x640) TrCH2: (0x144,	1x576) TrCH2: (0x144,
	TrCH2: (0x144, 1x144)	1x144)	1x144)	1x144)
>>>rlcSize	TrCH1: OctetMode	TrCH1: OctetMode	TrCH1: OctetMode	TrCH1: OctetMode
	TrCH2:BitMode	TrCH2:BitMode	TrCH2:BitMode	TrCH2:BitMode

Configuration	28.8 kbps conv. CS- data +	32 kbps conv. CS- data +	64kbps conv. CS- data +	14.4 kbps streaming CS-
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling	data + 3.4 kbps signalling
>>>>sizeType	TrCH1: type 2, part1= 11, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0	TrCH1: type 2, part1= 11, part2= 2 (640) TrCH2: type 2, part1= 2, part2= 0	TrCH1: type 2, part1= 11, part2= 2 (640) TrCH2: type 2, part1= 2, part2= 0	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2,
>>>>numberOfTbSizeList	(144) TrCH1: Zero,1, 2 (4)	(144) TrCH1: Zero, one	(144) TrCH1: Zero, 2 (4)	part2= 0 (144) TrCH1: Zero, one,
>>>logicalChannelList	TrCH2: Zero, one	TrCH2: Zero, one	TrCH2: Zero, one	TrCH2: Zero, one
>>semiStaticTF- Information	All	All	All	All
>>>tti	TrCH1: 40 TrCH2: 40	TrCH1: 20 TrCH2: 40	TrCH1: 20 TrCH2: 40	TrCH1: 40 TrCH2: 40
>>>channelCodingType	TrCH1: Turbo TrCH2: Convolutional	TrCH1: Turbo TrCH2: Convolutional	TrCH1: Turbo TrCH2: Convolutional	TrCH1: Turbo TrCH2: Convolutional
>>>codingRate	TrCH1: N/A TrCH2: Third	TrCH1: N/A TrCH2: Third	TrCH1: N/A TrCH2: Third	TrCH1: N/A TrCH2: Third
>>>rateMatchingAttribute	TrCH1: 180 TrCH2: 160	TrCH1: 185 TrCH2: 160	TrCH1: 170 TrCH2: 160	TrCH1: 165 TrCH2: 160
>>>crc-Size	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16
DL- AddReconfTransChInfoLis t				
>Downlink transport channel type	dch	dch	dch	dch
>dl- TransportChannelIdentity (should be as for UL)	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
>tfs-SignallingMode >>transportFormatSet	SameAsUL	SameAsUL	SameAsUL	SameAsUL
>>>dynamicTF-information >>>>tf0/ tf0,1				
>>>rlcSize >>>>sizeType				
>>>numberOfTbSizeList >>>>logicalChannelList				
>>ULTrCH-Id >dch-QualityTarget	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
>>bler-QualityValue	TrCH1: 2x10 ⁻³ TrCH2: Absent	TrCH1: 2x10 ⁻³ TrCH2: Absent	TrCH1: 2x10 ⁻³ TrCH2: Absent	TrCH1: 1x10 ⁻² TrCH2: Absent
TrCH INFORMATION, COMMON				
ul-CommonTransChInfo >tfcs-ID (TDD only)	1	1	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE	FALSE
>tfc-Subset >ul-TFCS	Absent, not required Normal TFCI signalling	Absent, not required Normal TFCI signalling	Absent, not required Normal TFCI signalling	Absent, not required Normal TFCI signalling
>>explicitTFCS- ConfigurationMode	Complete	Complete	Complete	Complete
>>>ctfcSize >>>>TFCS representation	Ctfc2Bit Addition	Ctfc2Bit Addition	Ctfc2Bit Addition	Ctfc4Bit Addition
>>>>TFCS list				
>>>>TFCS 1	(TF0, TF0)	(TF0, TF0)	(TF0, TF0)	(TF0, TF0)
>>>>>ctfc >>>>>gainFactorInform ation	0 Computed	0 Computed	0 Computed	0 Computed
>>>>>>referenceTFCld	0	0	0	0

>>>>TFCS 2 >>>>>ctfc >>>>>>gainFactorInform ation >>>>>βc (FDD only) >>>>>βd >>>>>referenceTFCId >>>>>ctfc >>>>>referenceTFCId >>>>>ctfc >>>>>TFCS 3 >>>>>ctfc >>>>>ctfc >>>>>TFCS 4 >>>>>ctfc	3.4 kbps signalling (TF1, TF0) 1 Computed N/A N/A 0 (TF2, TF0) 2 Computed 0 (TF0, TF1)	3.4 kbps signalling (TF1, TF0) 1 Computed N/A N/A 0 (TF0, TF1) 2 Computed	3.4 kbps signalling (TF1, TF0) 1 Computed N/A N/A 0 (TF0, TF1) 2 Computed	data + 3.4 kbps signalling (TF1, TF0) 1 Computed N/A N/A 0 (TF0, TF1) 2
>>>>>ctfc >>>>>gainFactorInform ation >>>>> β c (FDD only) >>>>> β d >>>>>referenceTFCId >>>>>ctfc >>>>>gainFactorInform ation >>>>>tfc (FDD only)	1 Computed N/A N/A 0 (TF2, TF0) 2 Computed 0 (TF0, TF1)	1 Computed N/A N/A 0 (TF0, TF1) 2 Computed	1 Computed N/A N/A 0 (TF0, TF1)	(TF1, TF0) 1 Computed N/A N/A 0 (TF0, TF1)
$\begin{array}{l} >>>>> \text{painFactorInform} \\ \text{ation} \\ >>>>> \beta c \text{ (FDD only)} \\ >>>>> \beta d \\ >>>>> \text{referenceTFCId} \\ >>>>> \text{tfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{referenceTFCId} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{TFCS 4} \\ >>>>> \text{referenceTFCId} \\ >>>> \text{referenceTFCId} \\ >>>> \text{referenceTFCId} \\ >>>> \text{referenceTFCId} \\ >>>> \text{referenceTFCId} \\ >>>>> \text{referenceTFCId} \\ >>>> \text{referenceTFCId} \\ >>>>> \text{referenceTFCId} \\ >>>> \text{referenceTFCId} \\ >>>> \text{referenceTFCId} \\ >>>>> \text{referenceTFCId} \\ >>>>> \text{referenceTFCId} \\ >>>>> \text{referenceTFCId} \\ >>>> \text{referenceTFCId} \\ >>> \text{referenceTFCId} \\ >>>> \text{referenceTFCId} \\ >>> \text{referenceTFCId} \\ >>> \text{referenceTFCId} \\ >> ref$	Computed N/A N/A 0 (TF2, TF0) 2 Computed 0 (TF0, TF1)	Computed N/A N/A 0 (TF0, TF1) 2 Computed	N/A N/A 0 (TF0, TF1)	N/A N/A 0 (TF0, TF1)
$\begin{array}{l} \text{ation} \\ >>>>>> \beta c \text{ (FDD only)} \\ >>>>> \beta d \\ >>>>> \text{referenceTFCId} \\ >>>> \text{TFCS 3} \\ >>>> \text{ctfc} \\ >>>>> \text{gainFactorInform ation} \\ >>>>> \text{TFCS 4} \\ >>>>> \text{ctfc} \\ >>>>> \text{TFCS 4} \\ >>>>>> \text{TFCS 4} \\ >>>>> \text{TFCS 4} \\ >>>> \text{TFCS 4} \\ >>>>> \text{TFCS 4} \\ >>>> \text{TFCS 4} \\ >>> \text{TFCS 4} \\ >>>> \text{TFCS 4} \\ >>> \text{TFCS 4} \\ >>>> \text{TFCS 4} \\ >>> \text{TFCS 4} \\ >>> \text{TFCS 4} \\ >> \text{TFCS 4} \\ >>> \text{TFCS 4} \\ >> \text$	N/A N/A 0 (TF2, TF0) 2 Computed 0 (TF0, TF1)	N/A N/A 0 (TF0, TF1) 2 Computed	N/A N/A 0 (TF0, TF1)	N/A N/A 0 (TF0, TF1)
>>>>>>βd >>>>>referenceTFCId >>>>>TFCS 3 >>>>>ctfc >>>>>gainFactorInform ation >>>>>TFCS 4 >>>>>ctfc	N/A 0 (TF2, TF0) 2 Computed 0 (TF0, TF1)	N/A 0 (TF0, TF1) 2 Computed	N/A 0 (TF0, TF1) 2	N/A 0 (TF0, TF1)
>>>>>referenceTFCId >>>>>TFCS 3 >>>>>ctfc >>>>>gainFactorInform ation >>>>>referenceTFCId >>>>>TFCS 4 >>>>>ctfc	0 (TF2, TF0) 2 Computed 0 (TF0, TF1)	0 (TF0, TF1) 2 Computed	0 (TF0, TF1) 2	0 (TF0, TF1)
>>>>>TFCS 3 >>>>>ctfc >>>>>painFactorInform ation >>>>>TFCS 4 >>>>>ctfc	(TF2, TF0) 2 Computed 0 (TF0, TF1)	(TF0, TF1) 2 Computed	(TF0, TF1) 2	(TF0, TF1)
>>>>>ctfc >>>>>gainFactorInform ation >>>>>referenceTFCId >>>>>TFCS 4 >>>>>ctfc	Computed 0 (TF0, TF1)	2 Computed	2	
>>>>> sgainFactorInform ation >>>>> referenceTFCId >>>>> TFCS 4 >>>>> ctfc	Computed 0 (TF0, TF1)	Computed		2
ation >>>>>referenceTFCId >>>>TFCS 4 >>>>>ctfc	0 (TF0, TF1)		Computed	
>>>>>referenceTFCId >>>>TFCS 4 >>>>>ctfc	(TF0, TF1)	0		Computed
>>>>TFCS 4 >>>>>ctfc	(TF0, TF1)		0	0
>>>>>ctfc		(TF1, TF1)	(TF1, TF1)	(TF1, TF1)
	.7	3	3	3
>>>>>gainFactorInform	3 Computed	Signalled	Signalled	Signalled
ation	Computed	Signalied	Signalied	Signalied
>>>>>βc (FDD only)	N/A	8	8	11
>>>>>βd	N/A	15	15	15
>>>>>referenceTFCId	0	0	0	0
>>>>TFCS 5	(TF1, TF1)	N/A	N/A	
>>>>>ctfc	4	. 47.1	. 47.1	
>>>>>gainFactorInform	Computed			
ation	•			
>>>>>>referenceTFCId	0			
>>>>TFCS 6	(TF2, TF1)	N/A	N/A	
>>>>>ctfc	5			
>>>>>gainFactorInform ation	Signalled			
>>>>>βc (FDD only)	8			
>>>>>βd	15			
>>>>>referenceTFCId	0			
>>>>TFCS 7				
>>>>>ctfc				
>>>>>gainFactorInform				
ation				
>>>>>>>referenceTFCId				
>>>>TFCS 8				
>>>>>ctfc				
>>>>>gainFactorInform				
ation >>>>>referenceTFCId				
>>>>>TFCS 9				
>>>>>ctfc				
>>>>>gainFactorInform				
ation				
>>>>>>referenceTFCId				
>>>>TFCS 10				
>>>>>ctfc				
>>>>>gainFactorInform ation				
>>>>>>βc (FDD only)				
>>>>>βd				
>>>>>pa >>>>>referenceTFCld				
dl-CommonTransChInfo				
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL	Same as UL
z 1100 Orginalii i givioue	Came as OL	Junio do UL	Jame as OL	Junio as OL
PhyCH INFORMATION FDD				
UL-DPCH-InfoPredef				

Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS- data + 3.4 kbps signalling	64kbps conv. CS- data + 3.4 kbps signalling	14.4 kbps streaming CS- data +
	3	3	3	3.4 kbps signalling
>ul-DPCH-				
PowerControlInfo				
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize	1	1	1	1
>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>puncturingLimit	0.92	0.8	0.92	1
DL- CommonInformationPrede				
>dl-DPCH-InfoCommon				
>>spreadingFactor	64	64	32	128
>>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>>pilotBits	8	8	8	8
>>positionFixed	Flexible	Flexible	Flexible	Flexible
PhyCH INFORMATION 3.84 Mcps TDD	I ICAIDIC	I ICAIDIC	I TOXIDIO	1 ICAIDIC
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo				
>>dpch-ConstantValue	0	0	0	0
>commonTimeslotInfo				
>>secondInterleavingMod	frameRelated	frameRelated	frameRelated	frameRelated
e				
>>tfci-Coding	16	8	8	8
>>puncturingLimit	0.44	0.8	0.56	0.8
>>repetitionPeriodAndLen	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
gth	'	'	'	'
DL- CommonInformationPrede f				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMo	frameRelated	frameRelated	frameRelated	frameRelated
de				
>>>tfci-Coding	16	8	8	8
>>>puncturingLimit	0.44	0.64	0.56	0.8
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
PhyCH INFORMATION				
1.28 Mcps TDD				
UL-DPCH-InfoPredef				
>commonTimeslotInfo				
>>secondInterleavingMod e	frameRelated	frameRelated	frameRelated	frameRelated
>>tfci-Coding	16	8	8	8
>>puncturingLimit	0.64	0.60	0.64	1
>>repetitionPeriodAndLen gth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL- CommonInformationPrede f				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMo de	frameRelated	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	16	8	8	8
>>>puncturingLimit	0.64	0.60	0.64	0.88
>>repetitionPeriodAndLe	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
ngth				·

Configuration	28.8 kbps	57.6 kbps	12.2 kbps
3	streaming CS- data +	streaming CS- data +	speech(multimode) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
Ref 34.108	16	17	1a
Default configuration identity	8	9	10
RB INFORMATION			
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	RIc-info	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3: NoDiscard RB5: N/A	RB1: N/A RB2- RB3: NoDiscard RB5: N/A	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15
>>transmissionWindowSiz e	RB5: N/A RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB5: N/A RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB5- RB7: N/A RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 300 RB5: N/A	RB1: N/A RB2- RB3: 300 RB5: N/A	RB1: N/A RB2- RB3: 300 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1 RB5: N/A	RB1: N/A RB2- RB3: 1 RB5: N/A	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE RB5: N/A	RB1: N/A RB2- RB3: TRUE RB5: N/A	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic >>segmentationIndication	RB2- RB3: 300 RB1- RB3: N/A RB5: FALSE	RB2- RB3: 300 RB1- RB3: N/A RB5: FALSE	RB2- RB3: 300 RB1- RB3: N/A RB5- RB7: FALSE

Configuration	28.8 kbps streaming CS-	57.6 kbps streaming CS-	12.2 kbps speech(multimode
	data + 3.4 kbps signalling	data + 3.4 kbps signalling) + 3.4 kbps signalling
rb-MappingInfo			
>UL- LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
>>ul- TransportChannelType	Dch	Dch	Dch
>>>transportChannelldenti ty	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5- RB7: N/A
>>mac- LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL- logicalChannelMappingList			
>>Mapping option 1	One mapping option	One mapping option	One mapping option
>>>dl- TransportChannelType	Dch	Dch	Dch
>>>>transportChannelIden tity	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH			
UL- AddReconfTransChInfoLis t			
>Uplink transport channel type	dch	dch	dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>transportFormatSet	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
>>dynamicTF-information			
>>>tf0/ tf0,1	TrCH1: (0x576, 1x576, 2x576) TrCH2: (0x144, 1x144)	TrCH1: (0x576, 1x576, 2x576, 3x576, 4x576) TrCH2: (0x144, 1x144)	TrCH1: (0x81) TrCH2: (0x 103 TrCH3: (0x 60) TrCH4: (0x144)
>>>rlcSize	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode	BitMode
>>>>sizeType	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 81 TrCH2: type 1: 103 TrCH3: type 1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>numberOfTbSizeList	TrCH1: Zero, one, 2 TrCH2: Zero, one	TrCH1: Zero, one, 2, 3, 4 TrCH2: Zero, one	TrCH1-4: Zero
>>>logicalChannelList	All	All	All
>>>tf 1			TrCH1: (1x39) TrCH2: (1x53) TrCH3: (1x60) TrCH4: (1x144)

Configuration	28.8 kbps streaming CS- data + 3.4 kbps signalling	57.6 kbps streaming CS- data + 3.4 kbps signalling	12.2 kbps speech(multimode) + 3.4 kbps signalling
L OCT (D)			T 0114 0 0
>>>numberOfTransportBl ocks			TrCH1-3: One
>>>rlc-Size			TrCH1-3: BitMode
>>>>sizeType			TrCH1: 1: 39
			TrCH2: 1: 53
			TrCH3: 1: 60
>>>>numberOfTbSizeList			TrCH1-3: One
>>>>logicalChannelList			TrCH1-3: all
>>>tf 2			TrCH1: (1x42) TrCH2: (1x63) TrCH3- TrCH4: N/A
>>>>numberOfTransportBl			TrCH1-2: One
ocks			
>>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 42
			TrCH2: type 1: 63
>>>>numberOfTbSizeList			TrCH1-2: One
>>>logicalChannelList			TrCH1: all
>>>ti 3			TrCH1: (1x55) TrCH2: (1x84)
			TrCH2: (1x64)
>>>numberOfTransportBl			TrCH1-2: Zero
ocks			110111 2. 2010
>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 55
·			TrCH2: type 1: 84
>>>>numberOfTbSizeList			TrCH1-2: One
>>>>logicalChannelList			TrCH1: all
>>>tf 4			TrCH1: (1x75)
			TrCH2: (1x103)
>>>>numberOfTransportBl			TrCH3- TrCH4: N/A TrCH1-2: One
ocks			110111-2. Offe
>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 75
0.510: 1: (TrCH2: type 1: 103
>>>>numberOfTbSizeList			TrCH1-2: One
>>>logicalChannelList			TrCH1: all
>>>tf 5			TrCH1: (1x81) TrCH2- TrCH4: N/A
>>>>numberOfTransportBl			TrCH1: One
ocks			
>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 81
>>>numberOfTbSizeList			TrCH1: One
>>>>logicalChannelList			TrCH1: all
>>semiStaticTF-			
Information	T=014: 40	T-014, 40	T-014 T-012 00
>>>tti	TrCH1: 40 TrCH2: 40	TrCH1: 40 TrCH2: 40	TrCH1- TrCH3: 20 TrCH4: 40
>>>channelCodingType	TrCH1: Turbo	TrCH1: Turbo	Convolutional
	TrCH2:	TrCH2:	
P 5 /	Convolutional	Convolutional	T 0114 T 0115
>>>codingRate	TrCH1: N/A TrCH2: Third	TrCH1: N/A	TrCH1- TrCH2: Third
	IIODZ. IIIIIO	TrCH2: Third	TrCH3: Half
			TrCH3: Hall
>>>rateMatchingAttribute	TrCH1: 155	TrCH1: 145	TrCH1: 200
	TrCH2: 160	TrCH2: 160	TrCH2: 190
			TrCH3: 235
			TrCH4: 160

Configuration	28.8 kbps streaming CS-	57.6 kbps streaming CS-	12.2 kbps speech(multimode
	data +	data +)+
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>>crc-Size	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16	TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16
DL- AddReconfTransChInfoLis t			
>Downlink transport channel type	dch	dch	dch
>dl- TransportChannelIdentity (should be as for UL)	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>tfs-SignallingMode	SameAsUL	SameAsUL	Independent <only and="" below="" different="" is="" on="" shown="" tf0="" trch1=""></only>
>>transportFormatSet			DedicatedTransChT FS
>>>dynamicTF-information			
>>>tf0/ tf0,1			TrCH1: (1x0)
>>>rlcSize			bitMode
>>>>sizeType			TrCH1: type 1: 0
>>>>numberOfTbSizeList			TrCH1: One
>>>>logicalChannelList	- O	- O	All
>>ULTrCH-ld	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>dch-QualityTarget			
>>bler-QualityValue	TrCH1: 1x10 ⁻² TrCH2: Absent	TrCH1: 1x10 ⁻² TrCH2: Absent	TrCH1: 7x10 ⁻³ TrCH2- TrCH4: Absent
TrCH INFORMATION, COMMON			
ul-CommonTransChInfo			
>tfcs-ID (TDD only)	1	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling
>>explicitTFCS- ConfigurationMode	Complete	Complete	Complete
>>>ctfcSize	Ctfc4Bit	Ctfc4Bit	Ctfc8Bit
>>>TFCS representation	Addition	Addition	Addition
>>>>TFCS list			
>>>>TFCS 1	(TF0, TF0)	(TF0, TF0)	(TF0, TF0, TF0, TF0)
>>>>>ctfc	0	0	0
>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>>referenceTFCld	0	0	0
>>>>TFCS 2	(TF1, TF0)	(TF1, TF0)	(TF1, TF0, TF0, TF0)
>>>>>ctfc	1	1	1
>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>βc (FDD only)	N/A	N/A	N/A
>>>>>βd	N/A	N/A	N/A
>>>>>referenceTFCId	0	0	0
>>>>TFCS 3	(TF2, TF0)	(TF2, TF0)	(TF2, TF1, TF0, TF0)
>>>>>ctfc	2	2	8

Configuration	28.8 kbps	57.6 kbps	12.2 kbps
	streaming CS- data +	streaming CS- data +	speech(multimode) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>>referenceTFCld	0	0	0
>>>>TFCS 4	(TF0, TF1)	(TF3, TF0)	(TF3, TF2, TF0, TF0)
>>>>>ctfc	3	3	15
>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>βc (FDD only)	N/A	N/A	N/A
>>>>>βd	N/A	N/A	N/A
>>>>>>referenceTFCld	0	0	0
>>>>TFCS 5	(TF1, TF1)	(TF4, TF0)	(TF4, TF3, TF0, TF0)
>>>>>ctfc	4	4	22
>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>referenceTFCld	0	0	0
>>>>TFCS 6	(TF2, TF1)	(TF0, TF1)	(TF5, TF4, TF1, TF0)
>>>>>ctfc	5	5	59
>>>>>gainFactorInform ation	Signalled	Computed	Computed
>>>>>βc (FDD only)	8	N/A	N/A
>>>>>βd	15	N/A	N/A
>>>>>>referenceTFCld	0	0	0
>>>>TFCS 7		(TF1, TF1)	(TF0,TF0,TF0,TF1)
>>>>>ctfc		6	60
>>>>> sgainFactorInform ation		Computed	Computed
>>>>>>referenceTFCld		0	0
>>>>TFCS 8		(TF2, TF1)	(TF1,TF0,TF0,TF1)
>>>>>ctfc		7	61
>>>>>gainFactorInform ation		Computed	Computed
>>>>>>referenceTFCId		0	0
>>>>TFCS 9		(TF3, TF1)	(TF2,TF1,TF0,TF1)
>>>>>ctfc		8	68
>>>>>gainFactorInform ation		Computed	Computed
>>>>>referenceTFCld		0	0
>>>>TFCS 10		(TF4, TF1)	(TF3,TF2,TF0,TF1)
>>>>>ctfc		9	75
>>>>>gainFactorInform ation		Signalled	Computed
>>>>>βc (FDD only)		8	N/A
>>>>>βd		15	N/A
>>>>>referenceTFCld		0	0
>>>>TFCS 11			(TF4,TF3,TF0,TF1)
>>>>>ctfc			82
>>>>>gainFactorInform ation			Computed
>>>>>referenceTFCId			(TES TEA TEA TEA)
>>>>TFCS 12			(TF5,TF4,TF1,TF1)
>>>>>ctfc >>>>>gainFactorInform			119 Signalled
ation			
>>>>>βc (FDD only)			11
>>>>>βd			15
>>>>>>referenceTFCId			0

Configuration	28.8 kbps streaming CS- data +	57.6 kbps streaming CS- data +	12.2 kbps speech(multimode) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
dl-CommonTransChInfo			
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION FDD			
UL-DPCH-InfoPredef			
>ul-DPCH-			
PowerControlInfo	A large with the A	A I	A large with the A
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize >tfci-Existence	TRUE	TRUE	TRUE
>puncturingLimit	1	1	0.88
DI -	1	I	0.00
CommonInformationPrede f			
>dl-DPCH-InfoCommon			_
>>spreadingFactor	64	32	128
>>tfci-Existence	TRUE	TRUE	FALSE
>>pilotBits	8	8	4
>>positionFixed	Flexible	Flexible	Fixed
PhyCH INFORMATION 3.84 Mcps TDD			
UL-DPCH-InfoPredef			
>ul-DPCH- PowerControlInfo			
>>dpch-ConstantValue	0	0	0
>commonTimeslotInfo			
>>secondInterleavingMod e	frameRelated	frameRelated	frameRelated
>>tfci-Coding	16	16	16
>>puncturingLimit	0.44	0.48	0.88
>>repetitionPeriodAndLen gth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL-			
CommonInformationPrede f			
>dl-DPCH-InfoCommon			
>>commonTimeslotInfo >>>secondInterleavingMo	frameRelated	frameRelated	frameRelated
de	ITAITIENEIAIEU	Hamerelated	Hamerelated
>>>tfci-Coding	16	16	16
>>>puncturingLimit	0.44	0.48	0.92
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
PhyCH INFORMATION 1.28 Mcps TDD			
UL-DPCH-InfoPredef			
>commonTimeslotInfo			
>>secondInterleavingMod e	frameRelated	frameRelated	
>>tfci-Coding	16	16	
>>puncturingLimit	0.64	0.72	
>>repetitionPeriodAndLen gth	repetitionPeriod1	repetitionPeriod1	
DL-			
CommonInformationPrede f			
>dl-DPCH-InfoCommon			
>>commonTimeslotInfo			
>>>secondInterleavingMo de	frameRelated	frameRelated	frameRelated

Configuration 28.8 kbps streaming CS- data + 3.4 kbps signalling		57.6 kbps streaming CS- data + 3.4 kbps signalling	12.2 kbps speech(multimode) + 3.4 kbps signalling	
>>>tfci-Coding	16	16	16	
>>>puncturingLimit	0.64	0.72	0.92	
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	

Configuration	10.2/6.7/5.9/4.75 kbps speech + 3.4 kbps signalling	7.4/6.7/5.9/4.75 kbps speech + 3.4 kbps signalling
Ref 34.108	N/A	N/A
Default configuration	11	12
identity		12
RB INFORMATION		
rb-Identity	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
,	RB3: 3, RB5: 5,	RB3: 3, RB5: 5,
	RB6: 6, RB7: 7,	RB6: 6, RB7: 7
	RB8: 8	
rlc-InfoChoice	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM	RB1: UM
	RB2- RB3: AM	RB2- RB3: AM
transmission DLC	RB5-RB7: TM	RB5-RB6: TM
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3:	RB1: N/A RB2- RB3:
Discardiviode	NoDiscard	NoDiscard
	RB5- RB7: N/A	RB5- RB6: N/A
>>>maxDat	RB1: N/A	RB1: N/A
	RB2- RB3: 15	RB2- RB3: 15
	RB5- RB7: N/A	RB5- RB6: N/A
>>transmissionWindowSiz	RB1: N/A	RB1: N/A
е	RB2- RB3: 128 for	RB2- RB3: 128 <u>for</u>
	UEs with more than	UEs with more than
	10 kbyte "total RLC	10 kbyte "total RLC
	AM buffer size" and 32 otherwise	AM buffer size" and 32 otherwise
	RB5- RB7: N/A	RB5- RB6: N/A
>>timerRST	RB1: N/A	RB1: N/A
	RB2- RB3: 300	RB2- RB3: 300
	RB5- RB7: N/A	RB5- RB6: N/A
>>max-RST	RB1: N/A	RB1: N/A
	RB2- RB3: 1	RB2- RB3: 1
	RB5- RB7: N/A	RB5- RB6: N/A
>>pollingInfo	RB1: N/A	RB1: N/A
	RB2- RB3: as below RB5- RB7: N/A	RB2- RB3: as below RB5- RB6: N/A
>>>lastTransmissionPDU-	RB2- RB3: FALSE	RB2- RB3: FALSE
Poll		
>>>lastRetransmissionPD	RB2- RB3: FALSE	RB2- RB3: FALSE
U-Poll	DD0 DD0 000	DD0 DD0 000
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A RB5- RB7: FALSE	RB1- RB3: N/A RB5- RB6: FALSE
>dl-RLC-Mode	RB1: UM	RB1: UM
Sante Mode	RB2- RB3: AM	RB2- RB3: AM
	RB5- RB7: TM	RB5- RB6: TM
	RB8: TM	RB7: TM
>>inSequenceDelivery	RB1: N/A	RB1: N/A
	RB2- RB3: TRUE	RB2- RB3: TRUE
	RB5- RB8: N/A	RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A	RB1: N/A
	RB2- RB3: 128 for	RB2- RB3: 128 for
	UEs with more than 10 kbyte "total RLC	UEs with more than 10 kbyte "total RLC
	AM buffer size" and	AM buffer size" and
	32 otherwise	32 otherwise
	RB5- RB8: N/A	RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A	RB1: N/A
	RB2- RB3: as below	RB2- RB3: as below
=	RB5- RB8: N/A	RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 300

>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A
->3egmentationinalcation	RB5- RB8: FALSE	RB5- RB7: FALSE
rb-MappingInfo	1100 1100:171202	TOO TOTALOE
>UL-	OneLogicalChannel	OneLogicalChannel
LogicalChannelMappings		J g
>>ul-	Dch	Dch
TransportChannelType		
>>>transportChannelIdentit	RB1- RB3: 4	RB1- RB3: 3
у	RB5: 1, RB6: 2,	RB5: 1, RB6: 2
	RB7: 3,	
>>logicalChannelIdentity	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
	RB3: 3	RB3: 3
do Cinal ist	RB5- RB7: N/A	RB5- RB6: N/A
>>rlc-SizeList	RB1- RB3: configured	RB1- RB3: configured
	RB5- RB7: N/A	RB5- RB6: N/A
>>mac-	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
LogicalChannelPriority	RB3: 3	RB3: 3
	RB5- RB7: 5	RB5- RB6: 5
>DL-		
logicalChannelMappingList		
>>Mapping option 1	One mapping option	One mapping option
>>>dl-	Dch	Dch
TransportChannelType		
>>>>transportChannellden	RB1- RB3: 4	RB1- RB3: 3
tity	RB5: 1, RB6: 2,	RB5: 1, RB6: 2,
	RB7: 3, RB8: 5	RB7:4
>>>logicalChannelIdentity	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
	RB3: 3	RB3: 3
T-CH INCORMATION DED	RB5- RB8: N/A	RB5- RB7: N/A
TrCH INFORMATION PER TrCH		
UL-		
AddReconfTransChInfoList		
>Uplink transport channel	dch	dch
type		
>transportChannelIdentity	TrCH1: 1, TrCH2: 2,	TrCH1: 1, TrCH2: 2,
	TrCH3: 3, TrCH4: 4	TrCH3: 3
>transportFormatSet	DedicatedTransChT	DedicatedTransChT
	FS	FS
>>dynamicTF-information		
>>>tf0/ tf0,1	TrCH1: (0x65)	TrCH1: (0x61)
	TrCH2: (0x 99)	TrCH2: (0x 87)
	TrCH3: (0x 40,	TrCH3: (0x 144,
	1x40)	1x144)
	TrCH4: (0x144, 1x144)	
>>>>rlcSize	BitMode	BitMode
>>>>sizeType	TrCH1: type 1: 65	TrCH1: type 1: 61
1 1 1 2 2 3 2 3 2 3 1 3 2 3	TrCH2: type 1: 99	TrCH2: type 1: 87
	TrCH3: type 1: 40	TrCH3: 2: type 2,
	TrCH4: 2: type 2,	part1= 2, part2= 0
	part1= 2, part2= 0	(144)
	(144)	
>>>>numberOfTbSizeList	TrCH1-2: Zero	TrCH1-2: Zero
	TrCH3-4: Zero, one	TrCH3: Zero, one
>>>>logicalChannelList	All	All
>>>tf 1	TrCH1: (1x39)	TrCH1: (1x39)
	TrCH2: (1x 53)	TrCH2: (1x53)
Of The second State of the	TrCH3- TrCH4: N/A	TrCH3: N/A
>>>>numberOfTransportBl	TrCH1: One TrCH2: One	TrCH1: One TrCH2: One
ocks >>>rlc-Size		
>>>ric-Size >>>>sizeType	TrCH1-2: BitMode TrCH1: 1: 39	TrCH1-2: BitMode TrCH1: 1: 39
//////////////////////////////////////	TrCH1: 1: 59	TrCH1: 1: 53
	TrCH1-2: One	TrCH1-2: One
>>>>numberOfTbSizeList		[C -7" CINA

	T 0114 II	T 0114 II
>>>>logicalChannelList	TrCH1: all	TrCH1: all
>>>tf 2	TrCH1: (1x42)	TrCH1: (1x42)
	TrCH2: (1x63)	TrCH2: (1x63)
and the second s	TrCH3- TrCH4: N/A TrCH1: One	TrCH3: N/A TrCH1: One
>>>numberOfTransportBl ocks	TrCh1: One	TrCh1: One TrCh2: One
>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>sizeType	TrCH1: type 1: 42	TrCH1: type 1: 42
>>>>Size i ype	TrCH1: type 1: 42	TrCH1: type 1: 42
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
/// // // // // // // // // // // // //	TrCH2: One	TrCH2: One
>>>>logicalChannelList	TrCH1: all	TrCH1: all
FFFF TO GIOGIO TIGHT TO LEGG	TrCH2: all	TrCH2: all
>>>tf 3	TrCH1: (1x55)	TrCH1: (1x55)
	TrCH2: (1x76)	TrCH2: (1x76)
	TrCH3- TrCH4: N/A	TrCH3: N/A
>>>>numberOfTransportBl	TrCH1: One	TrCH1: One
ocks	TrCh2: One	TrCh2: One
>>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType	TrCH1: type 1: 55	TrCH1: type 1: 55
	TrCH2: type 1: 76	TrCH2: type 1: 76
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
	TrCH2: One	TrCH2: One
>>>>logicalChannelList	TrCH1: all	TrCH1: all
15.4	TrCH2: all	TrCH2: all
>>>tf 4	TrCH1: (1x58)	TrCH1: (1x58)
	TrCH2: (1x99)	TrCH2: (1x87)
numberOfTrenenertDl	TrCH3- TrCH4: N/A TrCH1: One	TrCH3: N/A TrCH1: One
>>>numberOfTransportBl ocks	TrCh1: One	TrCh1: One
>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType	TrCH1: type 1: 58	TrCH1: type 1: 58
	TrCH2: type 1: 99	TrCH2: type 1: 87
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
	TrCH2: One	TrCH2: One
>>>>logicalChannelList	TrCH1: all	TrCH1: all
	TrCH2: all	TrCH2: all
>>>tf 5	TrCH1: (1x65)	TrCH1: (1x61)
	TrCH2- TrCH4: N/A	TrCH2- TrCH4: N/A
>>>>numberOfTransportBl	TrCH1: One	TrCH1: One
ocks		
>>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType	TrCH1: type 1: 42	TrCH1: type 1: 42
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
>>>>logicalChannelList	TrCH1: all	TrCH1: all
>>semistaticTF-Information	— — • • • • • • • • • • • • • • • • • • •	— 0111 — 511
>>>tti	TrCH1- TrCH3: 20	TrCH1- TrCH2: 20
	TrCH4: 40	TrCH3: 40
>>>channelCodingType	Convolutional	Convolutional
>>>channelCodingType >>>>codingRate	Convolutional TrCH1- TrCH2:	Convolutional TrCH1- TrCH2:
>>>channelCodingType >>>>codingRate	Convolutional TrCH1- TrCH2: Third	Convolutional TrCH1- TrCH2: Third
>>>channelCodingType >>>>codingRate	Convolutional TrCH1- TrCH2: Third TrCH3: Half	Convolutional TrCH1- TrCH2:
>>>codingRate	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third	Convolutional TrCH1- TrCH2: Third TrCH3: Third
>>>channelCodingType >>>>codingRate >>>rateMatchingAttribute	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200	Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200
>>>codingRate	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190	Convolutional TrCH1- TrCH2: Third TrCH3: Third
>>>codingRate	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235	Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190
>>>codingRate	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190	Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190
>>>codingRate >>>rateMatchingAttribute	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160	Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH1: 12 TrCH2: 0
>>>codingRate >>>rateMatchingAttribute	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12	Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12
>>>codingRate >>>rateMatchingAttribute >>>crc-Size DL-	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0	Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH1: 12 TrCH2: 0
>>>codingRate >>>rateMatchingAttribute >>>crc-Size DL- AddReconfTransChInfoList	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16	Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16
>>>codingRate >>>rateMatchingAttribute >>>crc-Size DL- AddReconfTransChInfoList >Downlink transport	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0	Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH1: 12 TrCH2: 0
>>>codingRate >>>rateMatchingAttribute >>>crc-Size DL- AddReconfTransChInfoList >Downlink transport channel type	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16	Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16
>>>codingRate >>>rateMatchingAttribute >>>crc-Size DL- AddReconfTransChInfoList >Downlink transport	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16	Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16

	1	1
>tfs-SignallingMode	Independent	Independent
	<only on="" td="" tf0="" trch1<=""><td><only on="" td="" tf0="" trch1<=""></only></td></only>	<only on="" td="" tf0="" trch1<=""></only>
	and tf0/tf1 on	and tf0/tf1 on
	TrCH5 are different	TrCH4 are different and shown below>
transportFormatCat	and shown below>	and snown below>
>>transportFormatSet		
>>>dynamicTF-information	T 0114 (4 0)	T 0114 (4 0)
>>>>tf0/ tf0,1	TrCH1: (1x0)	TrCH1: (1x0)
	TrCH5: (0x3, 1x3)	TrCH4: (0x3, 1x3)
>>>>rlcSize	BitMode	bitMode
>>>>sizeType	TrCH1: type 1: 0	TrCH1: type 1: 0
	TrCH5: type 1: 3	TrCH4: type 1: 3
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
	TrCH5: Zero, one	TrCH4: Zero, one
>>>>logicalChannelList	All	All
>>>semistaticTF-	same as UL except	same as DL except
Information	for TrCH5	for TrCH4
>>>>tti	TrCH5: 20	TrCH4: 20
>>>>channelCodingType	Convolutional	Convolutional
>>>>codingRate	TrCH5: Third	TrCH4: Third
>>>rateMatchingAttribute	TrCH5: 200	TrCH4: 200
>>>crc-Size	TrCH5: 12	TrCH4: 12
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2,	TrCH1: 1, TrCH2: 2,
	TrCH3: 3, TrCH4: 4,	TrCH3: 3
>dch-QualityTarget		
>>bler-QualityValue	TrCH1: 7x10 ⁻³	TrCH1: 7x10 ⁻³
	TrCH2- TrCH5:	TrCH2- TrCH4:
	Absent	Absent
TrCH INFORMATION,	71000111	71000111
COMMON		
ul-CommonTransChInfo		
>tfcs-ID (TDD only)	1	1
>sharedChannelIndicator	FALSE	FALSE
(TDD only)	FALSE	FALSE
> tfc-Subset	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI	Normal TFCI
Zui-11 00	signalling	signalling
>>explicitTFCS-	Complete	Complete
ConfigurationMode	Complete	Complete
>>>ctfcSize	Ctfc6Bit	Ctfc6Bit
>>>TFCS representation	Addition	Addition
>>>>TFC list	Addition	Addition
>>>>TFC 1150	/TEO TEO TEO	(TEO TEO TEO)
>>>>> FC	(TF0, TF0, TF0, TF0)	(TF0, TF0, TF0)
otfo	· '	0
>>>>>ctfc	0 Computed	Computed
>>>>>gainFactorInform ation	Computed	Computed
	0	0
>>>>>>referenceTFCId	0 /TE1_TE0_TE0	(TE1 TE0 TE0)
>>>>TFC 2	(TF1, TF0, TF0,	(TF1, TF0, TF0)
	TF0)	1
>>>>>CtfC		•
>>>>>gainFactorInform	Computed	Computed
ation	NI/A	NI/A
>>>>>>βc (FDD only)	N/A	N/A
>>>>>βd	N/A	N/A
>>>>>referenceTFCId	0	0
>>>>TFC 3	(TF2, TF1, TF0,	(TF2, TF1, TF0)
	TF0)	' '
>>>>>ctfc	8	8
>>>>>gainFactorInform	Computed	Computed
ation		
	0	0
>>>>>>>reference FCIa	U	O .
>>>>>referenceTFCld	1	
	(TF3, TF2, TF0,	(TF3, TF2, TF0)
	1	

Somputed Computed	>>>>> gainEactorInform	Computed	Computed
>>>>>>βc (FDD only) >>>>>>βd >>>>>>βd >>>>>>teferenceTFCld 0 0 0 0 >>>>>>tfC 5 TF0) TF0) >>>>>>ctfC 22 22 22 >>>>>>sgainFactorInform atton atton >>>>>>tfC 6 TF0) >>>>>>tfC 7 TF0) >>>>>>>tfC 7 TF0) >>>>>>tfC 7 TF0) TF1) >>>>>>tfC 7 TF0) >>>>>>tfC 7 TF0) >>>>>>tfC 7 TF0) >>>>>>tfC 7 TF0) TF1) >>>>>>>tfC 7 TF0) >>>>>>tfC 7 TF0) >>>>>>>tfC 7 TF0) >>>>>>>tfC 7 TF0) >>>>>>tfC 7 TF0) >>>>>>>tfC 7 TF0) >>>>>>>>>>>tfC 7 TF0) >>>>>>>>>>>>>tfC 7 TF0) TF1) >>>>>>>>>>>>>>>tfC 7 TF0) TF1) >>>>>>>>>>>>>>>>>tfC 7 TF0) TF1) >>>>>>>>>>>>>>>>>>tfC 7 TF0) TF1) >>>>>>>>>>>>>>>>>tfC 7 TF0) TF1) >>>>>>>>>>>>>>>>>>>tfC 7 TF0) TF1) >>>>>>>>>>>>>>>>>>>>>>>tfC 7 TF0) TF1) >>>>>>>>>>>>>>>>>>>tfC 7 TF0) TF1) >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>gainFactorInform	Computed	Computed
>>>>>>			
>>>>>>teferenceTFCId			
>>>>>ctfC 5 (FF4, TF3, TF0, TF0) (TF4, TF3, TF0) TF0) >>>>>>ctfc 22 22 >>>>>>pagainFactorInform ation Computed Computed >>>>>>ctfc (TF5, TF4, TF1, TF0, TF0, TF0, TF0, TF0) (TF5, TF4, TF1) >>>>>>ctfc 59 29 >>>>>>pbc (FDD only) Computed >>>>>>>bd O >>>>>>>bfc (FDD only) (TF0, TF0, TF0, TF0, TF0, TF0, TF1) >>>>>>ctfc 60 30 >>>>>>ctfc 60 30 >>>>>>ctfc 60 30 >>>>>>ctfc (TF1, TF0, TF0, TF0, TF1) (TF1, TF0, TF1) TF1) TF1) (TF1, TF0, TF0, TF1) >>>>>>ctfc 61 31 >>>>>>pagainFactorInform ation computed computed >>>>>>>>pagainFactorInform ation computed computed >>>>>>>pagainFactorInform ation computed computed >>>>>>>>>>ctfc 75 45 >>>>>>>>>>>tfc (TF2, TF1, TF0, TF1, TF1) (TF3, TF2, TF1) >>>>>>>>>>>>tfc 75 45 <td></td> <td></td> <td></td>			
Name		•	0
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>> 1FC 5		(1F4, 1F3, 1F0)
Some state of the first of t	- 14 -		00
ation 0 >>>>>>TFC 6 (TF5, TF4, TF1, TF0) >>>>>>ctfc 59 29 >>>>>>pgainFactorInform ation Computed Computed >>>>>>>>pg (FDD only) Computed Computed >>>>>>>pd (TF0, TF0, TF0, TF0, TF0, TF1) (TF0, TF0, TF0, TF1) TF1) >>>>>>tfc (FDD only) Computed Computed >>>>>>tfc (FDD only) Computed Computed >>>>>>>pagainFactorInform ation Computed Computed >>>>>>pagainFactorInform ation computed computed >>>>>>>>pb (FDD only) Computed computed >>>>>>>pb (FDD only) Computed computed >>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Section Sec	_	Computed	Computed
>>>>>TFC 6 (TF5, TF4, TF1, TF0) (TF5, TF4, TF1) (TF5, TF4, TF0) >>>>>>>>tfc 59 29 29 >>>>>>>p8 Computed Computed >>>>>>p8 Computed Computed >>>>>>>p8 Computed Computed >>>>>>>teferenceTFCId 0 0 >>>>>>teferenceTFCId 0 0 >>>>>>teferenceTFCId 0 0 >>>>>>teferenceTFCId 0 0 >>>>>tfC 8 (TF1, TF0, TF0, TF1) (TF1, TF0, TF1) >>>>>>tfC 8 31 computed >>>>>>>pgainFactorInform ation computed computed >>>>>>>pg (FDD only) computed computed >>>>>>>tfC 9 (TF2, TF1, TF0, TF1, TF1) (TF2, TF1, TF1) >>>>>>>tfc 9 (TF3, TF2, TF0, TF1) (TF3, TF2, TF1) >>>>>>>tfc 10 (TF3, TF2, TF0, TF1) (TF3, TF2, TF1) >>>>>>>tfc 11 (TF4, TF3, TF0, TF4, TF1) (TF4, TF3, TF1) >>>>>>>>>>>cffc PD only) computed computed >>>>>>>>>>> computed		0	0
TFO S9			(TES TEA TEO)
Some state	>>>>> FC 0		(175, 174, 170)
Somputed Computed Computed Somputed Somputed	>>>>>ctfc	· · · · · · · · · · · · · · · · · · ·	20
ation 0 >>>>>>>BC (FDD only) 0 >>>>>>>Bd 0 >>>>>>TFC 7 (TF0, TF0, TF0, TF1) (TF0, TF1) TF1) >>>>>>>tfC 7 (TF0, TF0, TF0, TF1) (TF0, TF1) TF1) >>>>>>>tfC 8 (TF1, TF0, TF0, TF0, TF1) (TF1, TF0, TF1) >>>>>>tfC 8 (TF1, TF0, TF0, TF1) (TF1, TF0, TF1) >>>>>>tfC 8 (TF1, TF0, TF0, TF1) (TF1, TF0, TF1) >>>>>>tfC 8 (TF2, TF1, TF0, TF1, TF1) (TF2, TF1, TF1) >>>>>>>>>>tfC 9 (TF2, TF1, TF0, TF1, TF1) (TF2, TF1, TF1) >>>>>>>>tfC 9 (TF2, TF1, TF0, TF1, TF1) (TF2, TF1, TF1) >>>>>>tfC 9 (TF3, TF2, TF0, TF1, TF2, TF1) (TF3, TF2, TF1) >>>>>>>>>tfC 10 (TF3, TF2, TF0, TF1) (TF3, TF2, TF1) >>>>>>>tfC (FDD only) (TF4, TF3, TF0, TF1) (TF4, TF3, TF1) >>>>>>>tfC (FDD only) (TF4, TF3, TF0, TF4, TF1) (TF4, TF3, TF1) >>>>>>>>tfC (FDD only) (TF5, TF4, TF1, TF4, TF1) (TF5, TF4, TF1) >>>>>>>tfC (FDD only) (TF5, TF4, TF1, TF4, TF1) (TF5, TF4, TF1) >>>>>>>tfC (FDD only) (TF5, TF4, TF1, T			
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		Computed	Computed
>>>>>>βd			
>>>>>>referenceTFCId 0 (TF0, TF0, TF0, TF0, TF1) (TF0, TF1) (TF0, TF1) (TF0, TF1) (TF1, TF1) (TF1, TF1) (TF1, TF0, TF1) (TF2, TF1, TF1) (TF3, TF2, TF1) (TF4, TF3, TF1) (TF5, TF4, TF1)		1	1
>>>>>tfc 7 (TF0, TF0, TF0, TF0, TF1) (TF0, TF0, TF1) >>>>>>ctfc 60 30 >>>>>>painFactorInform ation Computed Computed >>>>>>tfc 8 (TF1, TF0, TF0, TF1, TF0, TF1) (TF1, TF0, TF1) TF1) TF1 (TF1, TF0, TF1) >>>>>>tfc 8 (TF1, TF0, TF1) (TF1, TF0, TF1) >>>>>>painFactorInform ation computed computed >>>>>>tfc (FDD only) (TF2, TF1, TF0, TF1, TF1) (TF2, TF1, TF1) >>>>>>tfc 9 (TF2, TF1, TF0, TF1) (TF2, TF1, TF1) >>>>>>tfc 9 (TF3, TF2, TF0, TF1) (TF3, TF2, TF1) >>>>>>tfc 0 0 0 >>>>>>tfc 0 0 (TF3, TF2, TF1) >>>>>>tfc 0 0 (TF3, TF2, TF1) >>>>>>>>>tfc 0 0 (TF3, TF2, TF1) >>>>>>>tfc 0 0 (TF4, TF3, TF1) >>>>>>>>>>>>>>>>>>>>>>>>>>>>		0	
TF1		ŭ .	(TEO TEO TEA)
>>>>>ctfc 60 30 >>>>>>sgainFactorInform ation Computed Computed >>>>>>>referenceTFCId 0 0 >>>>>>tFC 8 (TF1, TF0, TF0, TF0, TF1, TF0, TF1) (TF1, TF0, TF1) >>>>>>ctfc 61 31 >>>>>>pactfc computed computed >>>>>>ps (FDD only) computed >>>>>>>ps (FDD only) 0 >>>>>>>ps (FDD only) 0 >>>>>>>TFC 9 (TF2, TF1, TF0, TF1, TF1) TF1) (TF2, TF1, TF1) >>>>>>>tfc (FD only) computed >>>>>>>>>>>tfc (FD only) computed >>>>>>>pd (FDD only) computed >>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>> IFC /		(11-0, 11-0, 11-1)
>>>>>sgainFactorInform ation Computed Computed >>>>>>TFC 8 (TF1, TF0, TF0, TF1) (TF1, TF0, TF1) >>>>>>tfC 8 (TF1, TF0, TF0, TF1) (TF1, TF0, TF1) >>>>>>tfC 8 31 computed >>>>>>pgc (FDD only) computed computed >>>>>>pgc (FDD only) price (TF2, TF1, TF0, TF1, TF1) (TF2, TF1, TF1) >>>>>>tfC 9 (TF2, TF1, TF0, TF1, TF1) (TF2, TF1, TF1) (TF3, TF2, TF1, TF1) >>>>>>tfC 0 0 0 0 >>>>>>tfC 10 (TF3, TF2, TF0, TF1) (TF3, TF2, TF1) (TF3, TF2, TF1) >>>>>>tfC 10 (TF3, TF2, TF0, TF3, TF2, TF1) (TF3, TF2, TF1) (TF3, TF2, TF1) >>>>>>>tfC 10 (TF3, TF2, TF0, TF3, TF2, TF1) (TF4, TF3, TF0, TF4, TF3, TF1) (TF4, TF3, TF1) (TF4, TF3, TF1) >>>>>>>>>>>>>>>>>>>>>>>>>>>>			20
ation >>>>>>referenceTFCld 0 0 >>>>>TFC 8 (TF1, TF0, TF0, TF1) TF1) >>>>>>ctfc 61 31 computed computed ation >>>>>>βc (FDD only) >>>>>tfc 9 (TF2, TF1, TF0, TF1, TF1) TF1) >>>>>>tfc 68 38 >>>>>>tfc 68 38 >>>>>>tfc 68 38 >>>>>>tfc 68 38 >>>>>>tfc 10 (TF3, TF2, TF1, TF1) TF1) >>>>>tfc 10 (TF3, TF2, TF0, TF3, TF2, TF1) TF1) >>>>>tfc 10 (TF3, TF2, TF0, TF3, TF2, TF1) >>>>>>tfc 75 45 >>>>>>bfd >>>>>pfd (TF4, TF3, TF0, TF4, TF3, TF1) TF1) >>>>>>tfc 10 (TF4, TF3, TF0, TF4, TF3, TF1) >>>>>>>tfc 10 (TF4, TF3, TF0, TF4, TF3, TF1) >>>>>>tfc 10 (TF4, TF3, TF0, TF4, TF3, TF1) >>>>>>tfc (FDD only) >>>>>>tfc (FDD only) >>>>>tfe (FDD only) >>>>>>tfc (TF4, TF3, TF0, TF4, TF4, TF4, TF4, TF4, TF1) TF1) >>>>>>>tfc (TF4, TF3, TF0, TF4, TF4, TF4, TF4, TF4, TF1) TF1) >>>>>>tfc (TF5, TF4, TF1, TF5, TF4, TF1) TF1) >>>>>>>tfc (TF5, TF4, TF1, TF5, TF4, TF1) TF1) >>>>>>>tfc (TF5, TF4, TF1) TF1) >>>>>>>tfc (TF5, TF4, TF1) TF1) >>>>>>>>tfc (TF5, TF4, TF1) TF1) >>>>>>>tfc (TF5, TF4, TF1) TF1) >>>>>>>>tfc (TF5, TF4, TF1) TF1) >>>>>>>tfc (TF5, TF4, TF1) TF1) >>>>>>>>tfc (TF5, TF4, TF1) TF1) >>>>>>>>tfc (TF5, TF4, TF1) TF1) >>>>>>>>>tfc (TF5, TF4, TF1) TF1) >>>>>>>>>tfc (TF5, TF4, TF1) TF1) >>>>>>>>>>>>>>tfc (TF5, TF4, TF1) TF1) >>>>>>>>>>>>>>>>>>tfc (TF5, TF4, TF1) TF1) >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Some states		Computed	Computed
>>>>>>TFC 8 (TF1, TF0, TF0, TF1) (TF1, TF0, TF1) >>>>>>>ctfc 61 31 >>>>>>>bgc (FDD only) computed computed >>>>>>bgd 0 0 >>>>>>TFC 9 (TF2, TF1, TF0, TF1) (TF2, TF1, TF1) >>>>>>ctfc 68 38 >>>>>>pgainFactorInform ation computed computed >>>>>>TFC 10 (TF3, TF2, TF0, TF1) (TF3, TF2, TF1) >>>>>>>ctfc 75 45 >>>>>>pgainFactorInform ation computed computed >>>>>>pg (FDD only) computed >>>>>>>pg (FDD only) computed computed >>>>>>>pg (FDD only) computed computed >>>>>>>pg (FDD only) computed computed >>>>>>>>TFC 11 (TF4, TF3, TF0, TF4, TF1) (TF4, TF3, TF1) >>>>>>>>ctfc 82 52 >>>>>>>>>>>>>>>>>>>>>>>>> computed computed >>>>>>>>>>>>>>>>>>>>>>>>>>>>			10
New computed TF1 (a) New computed 31 New computed computed New			-
>>>>>>gainFactorInform ation computed >>>>>>pgc (FDD only) computed >>>>>>pd 0 >>>>>>TFC 9 (TF2, TF1, TF0, TF1, TF1) >>>>>>tfc 68 38 >>>>>>pdinFactorInform ation computed >>>>>>tfc 10 (TF3, TF2, TF0, TF1, TF2, TF1) TF1) (TF3, TF2, TF0, TF1, TF2, TF1) >>>>>>tfc 10 (TF3, TF2, TF0, TF1, TF2, TF1) >>>>>>tfc (FDD only) computed >>>>>>>pd (FDD only) computed >>>>>>pd (FDD only) computed >>>>>>pd (FDD only) computed >>>>>>pd (FDD only) computed >>>>>>>>pd (FDD only) computed >>>>>>>tfc (FDD only) computed >>>>>>>tfc (FDD only) computed >>>>>>>tfc (FDD only) ff5, TF4, TF1, TF4, TF1, TF5, TF4, TF1, TF1) TF1) signalled >>>>>>tfc (FDD only) ff5, TF4, TF1, TF4, TF1, TF5, TF4, TF1, TF1, TF1, TF1, TF1, TF1, TF1, TF1	>>>>> FC 8		(161, 160, 161)
$\begin{array}{c} >>>>>> \beta c \ (FDD \ only) \\ >>>>>> \beta d \\ >>>>>> FFC \ 9 \\ TF2, TF1, TF0, TF1) \\ >>>>> Computed \\ >>>>> TFC \ 9 \\ TF1) \\ >>>>> TF1) \\ >>>>> TF1) \\ >>>>> TF1) \\ >>>>> TF2, TF1, TF0, TF1, TF1) \\ TF1) \\ >>>>>> TF2, TF1, TF1) \\ >>>>> TF2, TF1, TF1) \\ >>>>> TF2, TF1, TF1) \\ >>>>> TF1) \\ >>>>> TF2, TF1, TF1) \\ >>>>> TF1) \\ >>>>> TF2, TF1, TF1) \\ >>>>> TF2, TF1) \\ TF1) \\ >>>>> TF2, TF1) \\ TF1) \\ >>>>> TF2, TF2, TF2, TF3, TF2, TF1) \\ TF1) \\ >>>>> TF2, TF1) \\ TF1) \\ >>>>> TF2, TF3, TF2, TF3, TF3, TF4, TF4, TF4, TF5, TF4, TF1) \\ TF1) \\ >>>>> TF2, TF3, TF4, TF3, TF4, TF3, TF4, TF4, TF5, TF4, TF1) \\ TF1) \\ >>>>> TF2, TF3, TF4, TF4, TF4, TF5, TF4, TF1, TF4, TF4, TF4, TF4, TF4, TF4, TF4, TF4$		· · · · · · · · · · · · · · · · · · ·	21
ation >>>>>>βc (FDD only) >>>>>>>βd 0 >>>>>>TFC 9 (TF2, TF1, TF0, TF1) TF1) TF1) >>>>>>ctfc 68 >>>>>>pagainFactorInform ation computed >>>>>>referenceTFCId 0 >>>>>>TFC 10 (TF3, TF2, TF0, TF1) TF1) TF1) >>>>>>ctfc 75 >>>>>>pdc (FDD only) >>>>>>>pdd 0 >>>>>>referenceTFCId 0 >>>>>>pda (TF4, TF3, TF0, TF1) TF1) (TF4, TF3, TF1) >>>>>>pda (TF4, TF3, TF0, TF1) TF1) (TF4, TF3, TF1) >>>>>>tfc 82 >>>>>>pagainFactorInform ation computed >>>>>>tfc (TF5, TF4, TF1, TF1, TF5, TF4, TF1) TF1) TF1) >>>>>>>tfc 97 >>>>>>>>>>>pdc (FDD only) 11 >>>>>>>>>>>pda 15 >>>>>>>>>>>>>>>>>>>>>>>>>> >>>>>>>>>>>>>>>>>>>>>>>>>>>>			
>>>>>>> βc (FDD only)		computed	Computed
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
TF1		•	0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	>>>>> 1FC 9		(IF2, IF1, IF1)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- 16 -		00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		computed	computed
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		0	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	>>>>>>TEC 10		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	>>>>> FC 10		(153, 152, 151)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	>>>>>ctfc		15
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Jonipatoa	Jonipulou
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			10
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			_
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	>>>>> IFG 11 		(11-4, 11-3, 11-1)
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$			52
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	Compated	computed
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		0	0
			-
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			(110, 117, 111)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	>>>>>ctfc		59
ation 11 >>>>>>βc (FDD only) 11 >>>>>>βd 15 >>>>>>referenceTFCId 0 > TFC subset list 0			
>>>>>βc (FDD only) 11 11 >>>>>βd 15 15 >>>>>referenceTFCId 0 0	_	3.3	3.9
>>>>>βd 15 15 >>>>>referenceTFCId 0 0 > TFC subset list		11	11
>>>>>referenceTFCId 0 0 > TFC subset list			
> TFC subset list		_	
		U	U
>> IFO Subset I (speech rate 10.2) (speech rate 7.4)		(appach rate 40.0)	(opooch roto 7.4)
	>>TFU SUDSECT	(speech rate 10.2)	(speech rate 7.4)

	I /====	(==o, ==o,
>>> Allowed transport	(TFC1, TFC2,	(TFC1, TFC2,
format combination list	TFC7, TFC8, TFC6,	TFC7, TFC8, TFC6,
	TFC12)	TFC12)
>>TFC subset 2	(speech rate 6.7)	(speech rate 6.7)
>>> Allowed transport	(TFC1, TFC2,	(TFC1, TFC2,
format combination list	TFC7, TFC8, TFC5,	TFC7, TFC8, TFC5,
	TFC11)	TFC11)
>>TFC subset 3	(speech rate 5.9)	(speech rate 5.9)
>>> Allowed transport	(TFC1, TFC2,	(TFC1, TFC2,
format combination list	TFC7, TFC8, TFC4,	TFC7, TFC8, TFC4,
	TFC10)	TFC10)
>>TFC subset 4	(speech rate 4.75)	(speech rate 4.75)
>>> Allowed transport	(TFC1, TFC2,	(TFC1, TFC2,
format combination list	TFC7, TFC8, TFC3,	TFC7, TFC8, TFC3,
	TFC9)	TFC9)
dl-CommonTransChInfo		
>tfcs-SignallingMode	Independent	Independent
ul-CommonTransChInfo		
>tfcs-ID (TDD only)	1	1
>sharedChannelIndicator	FALSE	FALSE
(TDD only)		
> tfc-Subset	Absent, not required	Absent, not required
>dI-TFCS	Normal TFCI	Normal TFCI
	signalling	signalling
>>explicitTFCS-	Complete	Complete
ConfigurationMode		
>>>ctfcSize	Ctfc6Bit	Ctfc6Bit
>>>>TFCS representation	Addition	Addition
>>>>TFCS list		
>>>>TFC 1	(TF0, TF0, TF0,	(TF0, TF0, TF0,
	TF0, TF0)	TF0)
>>>>>ctfc	0	0
>>>>TFC 2	(TF1, TF0, TF0,	(TF1, TF0, TF0,
	TF0, TF0)	TF0)
>>>>>ctfc	1	1
>>>>TFC 3	(TF2, TF1, TF0,	(TF2, TF1, TF0,
	TF0, TF0)	TF0)
>>>>>ctfc	8	8
>>>>>TFC 4	(TF3, TF2, TF0,	(TF3, TF2, TF0,
	TF0, TF0)	TF0)
>>>>>ctfc	15	15
>>>>>TFC 5	(TF4, TF3, TF0,	(TF4, TF3, TF0,
	TF0, TF0)	TF0)
>>>>>ctfc	22	22
>>>>TFC 6	(TF5, TF4, TF1,	(TF5, TF4, TF0,
-	TF0, TF0)	TF0)
>>>>>ctfc	59	29
>>>>TFC 7	(TF0, TF0, TF0,	(TF0, TF0, TF1,
	TF1, TF0)	TF0)
>>>>>ctfc	60	30
>>>>TFC 8	(TF1, TF0, TF0,	(TF1, TF0, TF1,
	TF1, TF0)	TF0)
>>>>>ctfc	61	31
>>>>TFC 9	(TF2, TF1, TF0,	(TF2, TF1, TF1,
	TF1, TF0)	TF0)
>>>>>ctfc	68	37
>>>>TFC 10	(TF3, TF2, TF0,	(TF3, TF2, TF1,
	TF1, TF0)	TF0)
>>>>>ctfc	75	55
>>>>TFC 11	(TF4, TF3, TF0,	(TF4, TF3, TF1,
-	TF1, TF0)	TF0)
>>>>>ctfc	82	52
>>>>TFC 12	(TF5, TF4, TF1,	(TF5, TF4, TF1,
	TF1, TF0)	TF0)
>>>>>ctfc	119	59

>>>>TFC 13	(TF0, TF0, TF0, TF0, TF1)	(TF0, TF0, TF0, TF1)
>>>>>ctfc	120	60
>>>>TFC 14	(TF1, TF0, TF0,	(TF1, TF0, TF0,
	TF0, TF1)	TF1)
>>>>>ctfc	121	61
>>>>TFC 15	(TF2, TF1, TF0,	(TF2, TF1, TF0,
7777711010	TF0, TF1)	TF1)
>>>>>ctfc	128	68
>>>>TFC 16	(TF3, TF2, TF0,	(TF3, TF2, TF0,
7777711010	TF0, TF1)	TF1)
>>>>>ctfc	135	75
>>>>TFC 17	(TF4, TF3, TF0,	(TF4, TF3, TF0,
7777711017	TF0, TF1)	TF1)
>>>>>ctfc	152	82
>>>>TFC 18	(TF5, TF4, TF1,	(TF5, TF4, TF0,
7777711010	TF0, TF1)	TF1)
>>>>>ctfc	189	89
>>>>TFC 19	(TF0, TF0, TF0,	(TF0, TF0, TF1,
	TF1, TF1)	TF1)
>>>>>ctfc	180	90
>>>>TFC 20	(TF1, TF0, TF0,	(TF1, TF0, TF1,
	TF1, TF1)	TF1, 1F0, 1F1,
>>>>>ctfc	181	91
>>>>TFC 21	(TF2, TF1, TF0,	(TF2, TF1, TF1,
	TF1, TF1, TF0,	TF1)
>>>>>ctfc	188	98
>>>>>TFC 22	(TF3, TF2, TF0,	(TF3, TF2, TF1,
33333110 22	TF1, TF1)	TF1)
>>>>>ctfc	195	105
>>>>TFC 23	(TF4, TF3, TF0,	(TF4, TF3, TF1,
>>>>>1FG 23	TF1, TF1)	TF1)
>>>>>ctfc	239	112
>>>>TFC 24	(TF5, TF4, TF1,	(TF5, TF4, TF1,
>>>>> IFO 24	TF1, TF1)	TF1)
>>>>>ctfc	218	119
PhyCH INFORMATION	210	113
FDD		
UL-DPCH-InfoPredef		
>ul-DPCH-		
PowerControlInfo		
>>powerControlAlgorithm	Algorithm 1	Algorithm 1
>>>tpcStepSize	1	1
>tfci-Existence	TRUE	TRUE
>puncturingLimit	0.88	0.88
DL-	0.00	0.00
CommonInformationPredef		
>dl-DPCH-InfoCommon		
>>spreadingFactor	128	128
>>tfci-Existence	FALSE	FALSE
>>pilotBits	4 Fixed	4 Fixed
>>positionFixed	Fixed	Fixed
DE CLUBICODA A TION		
PhyCH INFORMATION		
3.84 Mcps TDD		
UL-DPCH-InfoPredef		
>ul-DPCH-		
PowerControlInfo	0	
>>dpch-ConstantValue	0	0
>commonTimeslotInfo	forma D. I. f. I	forma D. I. t. I
>>secondInterleavingMode	frameRelated	frameRelated
>>tfci-Coding	16	16
>>puncturingLimit	0.60	0.60
>>repetitionPeriodAndLeng th	repetitionPeriod1	repetitionPeriod1
	i .	i l

	T	
DL-		
CommonInformationPredef		
>dl-DPCH-InfoCommon		
>>commonTimeslotInfo		
>>>secondInterleavingMod	frameRelated	frameRelated
е		
>>>tfci-Coding	16	16
>>>puncturingLimit	0.60	0.60
>>>repetitionPeriodAndLe	repetitionPeriod1	repetitionPeriod1
ngth		
PhyCH INFORMATION		
1.28 Mcps TDD		
UL-DPCH-InfoPredef		
>commonTimeslotInfo		
>>secondInterleavingMode	frame Related	frame Related
>>tfci-Coding	16	16
>>puncturingLimit	0.64	0.64
>>repetitionPeriodAndLeng	repetitionPeriod1	repetitionPeriod1
th		
DL-		
CommonInformationPredef		
>dl-DPCH-InfoCommon		
>>commonTimeslotInfo		
>>>secondInterleavingMod	frame Related	frame Related
е		
>>>tfci-Coding	16	16
>>>puncturingLimit	0.64	0.64
>>>repetitionPeriodAndLe	repetitionPeriod1	repetitionPeriod1
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3GPP TSG-RAN2 Meeting #33 Sophia Antipolis, France, 11th-15th November 2002

	CHANGE REQUEST							CR-Form-v7						
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How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked \(\mathcal{H} \) contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

13.7 Parameter values for default radio configurations

The UE shall support the use of the default radio configurations that are specified in the following.

NOTE 1: These configurations are based on [41] and cover a number of RAB and signalling connection configurations.

In the table that is used to specify the parameter values for these default configurations, the following principles are used:

- Optional IEs that are not used are omitted;
- In case no parameter value is specified in a column, this means the value given the previous (left side) column applies.
- NOTE 2: If needed, signalling radio bearer RB4 is established after the completion of handover.
- NOTE 3: For each default configuration, the value of FDD, 3.84 Mcps TDD and 1.28 Mcps TDD parameters are specified. All parameters apply to FDD, 3.84 Mcps TDD and 1.28 Mcps TDD modes, unless explicitly stated otherwise. It should be noted that in this respect default configurations differ from pre-defined configurations, which only include parameter values for one mode.
- NOTE 4: The transport format sizes, indicated in the following table, concern the RLC PDU size, since all configurations concern dedicated channels. The transport block sizes indicated in TS 34.108 are different since these include the size of the MAC header.

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech + 3.4 kbps signalling	12.2 kbps speech + 3.4 kbps signalling
Ref 34.108	2	3	6	4
Default configuration identity	0	1	2	3
RB INFORMATION				
rb-Identity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	RIc-info	RIc-info	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM RB5-RB6: TM	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3: NoDiscard	RB1: N/A RB2- RB3: NoDiscard	RB1: N/A RB2- RB3: NoDiscard RB5- RB6: N/A	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15 RB5- RB6: N/A	RB1: N/A RB2- RB3: 15 RB5- RB7: N/A
>>transmissionWindowSiz e	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB6: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300 RB5- RB6: N/A	RB1: N/A RB2- RB3: 300 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1	RB1: N/A RB2- RB3: 1	RB1: N/A RB2- RB3: 1 RB5- RB6: N/A	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below RB5- RB6: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech	12.2 kbps speech
		Signaming	3.4 kbps signalling	3.4 kbps signalling
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 100	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A RB5- RB6: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM RB5- RB6: TM	RB1: UM RB2- RB3: AM RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE	RB1: N/A RB2- RB3: TRUE	RB1: N/A RB2- RB3: TRUE RB5- RB6: N/A	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB6: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below RB5- RB6: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 100	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A RB5- RB6: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
rb-MappingInfo	!			
>UL- LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
>>ul- TransportChannelType	Dch	Dch	Dch	Dch
>>>transportChannelldentit y	RB1- RB3: 1	RB1- RB3: 1	RB1- RB3: 3 RB5: 1, RB6: 2	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured	RB1- RB3: configured	RB1- RB3: configured RB5- RB6: N/A	RB1- RB3: configured RB5- RB7: N/A
>>mac- LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: 5	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL- logicalChannelMappingList				
>>Mapping option 1	One mapping option	One mapping option	One mapping option	One mapping option
>>>dl- TransportChannelType	Dch	Dch	Dch	Dch
>>>transportChannellden tity	RB1- RB3: 1	RB1- RB3: 1	RB1- RB3: 3 RB5: 1, RB6: 2	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH				
UL- AddReconfTransChInfoList				
>Uplink transport channel type	dch	dch	dch	dch

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech	12.2 kbps speech
		Signaling	3.4 kbps signalling	3.4 kbps signalling
>transportChannelIdentity	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>transportFormatSet	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
>>dynamicTF-information				
>>>tf0/ tf0,1	TrCH1: (0x144, 1x144)	TrCH1: (0x144, 1x144)	TrCH1: (0x75) TrCH2: (0x 84 1x84) TrCH3: (0x144, 1x144)	TrCH1: (0x81) TrCH2: (0x 103, 1x103) TrCH3: (0x 60, 1x60) TrCH4: (0x144, 1x144)
>>>rlcSize	BitMode	BitMode	BitMode	BitMode
>>>>sizeType	TrCH1: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 75 TrCH2: type 1: 84 TrCH3: 2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 81 TrCH2: type 1: 103 TrCH3: type 1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>numberOfTbSizeList	TrCH1: Zero, one	TrCH1: Zero, one	TrCH1: Zero TrCH2-3: Zero, one	TrCH1: Zero TrCH2-4: Zero, one
>>>>logicalChannelList	All	All	All	All
>>>tf 1	N/A	N/A	TrCH1: (1x39) TrCH2- TrCH4: N/A	TrCH1: (1x39) TrCH2- TrCH4: N/A
>>>numberOfTransportBl ocks			TrCH1: One	TrCH1: One
>>>rlc-Size			TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType			TrCH1: 1: 39	TrCH1: 1: 39
>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>logicalChannelList			TrCH1: all	TrCH1: all
>>>tf 2	N/A	N/A	TrCH1: (1x75) TrCH2- TrCH3: N/A	TrCH1: (1x81) TrCH2- TrCH4: N/A
>>>numberOfTransportBl ocks			TrCH1: Zero	TrCH1: Zero
>>>rlc-Size			TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 75	TrCH1: type 1: 81
>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>>logicalChannelList			TrCH1: all	TrCH1: all
>>semistaticTF-Information				
>>>tti	TrCH1: 40	TrCH1: 10	TrCH1- TrCH2: 20 TrCH3: 40	TrCH1- TrCH3: 20 TrCH4: 40
>>>channelCodingType	Convolutional	Convolutional	Convolutional	Convolutional
>>>>codingRate	TrCH1: Third	TrCH1: Third	TrCH1- TrCH2: Third TrCH3: Third	TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 160	TrCH1: 160	TrCH1: 200 TrCH2: 190 TrCH3: 160	TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160
>>>crc-Size	TrCH1: 16	TrCH1: 16	TrCH1: 12 TrCH2: 0 TrCH3: 16	TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16
DL-				
AddReconfTransChInfoList >Downlink transport	dch	dch	dch	dch
channel type >dl- TransportChannelIdentity (should be as for UL)	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4

SameAsUL SameAsUL Explicit Explicit	Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech	12.2 kbps speech
Solit (10 on Tr.CH Solitiferent and shown belows Solitiferent and shown Solitif			0.39	3.4 kbps signalling	-
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	-				
Seminoring Simble Simbl				TrCH1: (1x0)	TrCH1: (1x0)
>>>>>mbegicalization >>>Inchit: One >>>>logicalization >>>Inchit: One >>>>logicalization >>>Inchit: One >>>>logicalization >>>>logicalization >>>>>logicalization >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>					` ′
>>>>>mbegicalization >>>Inchit: One >>>>logicalization >>>Inchit: One >>>>logicalization >>>Inchit: One >>>>logicalization >>>>logicalization >>>>>logicalization >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>sizeType			TrCH1: type 1: 0	TrCH1: type 1: 0
SVELTECH-Id Tr.CHI: 1 Tr.CHI: 1 Tr.CHI: 2, Tr.CHI: 1, Tr.CH2: 2, Tr.CH3: 3, Tr.CH4: 4.					
Match QualityTarget	>>>>logicalChannelList			All	All
Sobler-QualityValue TrCH1: \$x10^2 TrCH1: \$x10^2 TrCH1: \$x10^3 TrCH2: TrCH2: TrCH3: Absent		TrCH1: 1	TrCH1: 1		
Sobler-QualityValue TrCH1: \$x10^2 TrCH1: \$x10^2 TrCH1: \$x10^3 TrCH2: TrCH2: TrCH3: Absent	>dch-QualityTarget				
COMMON ul-CommonTransChinfo vltos-ID (TDD only) 1	>>bler-QualityValue	TrCH1: 5x10 ⁻²	TrCH1: 5x10 ⁻²	TrCH2- TrCH3:	TrCH2- TrCH4:
Stros-ID (TDD only)	COMMON				
Sahared Channel Indicator (TDD only)					
(TDD only) Absent, not required value Absent, not required signalling Absent, not required Normal TFCI Signalled Computed Complete Computed		· ·	-	•	
Normal TFCI Signalling S		FALSE	FALSE	FALSE	FALSE
Signalling Signalling Signalling Signalling Signalling Complete Complete					
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ation O O O >>>>>>TFCS 2 (TF1) (TF1) (TF1, TF0, TF0) (TF1, TF0, TF0, TF0) >>>>>>ctfc 1 1 1 1 >>>>>>pgainFactorInform ation Signalled Signalled Computed Computed >>>>>>βd 15 15 N/A N/A >>>>>>TFCS 3 (TF2, TF1, TF0) (TF2, TF1, TF1) (TF2, TF1, TF1) >>>>>>>tfc 5 11 Computed >>>>>>pdinFactorInform ation Computed Computed Computed >>>>>>tfc (FD, TF0, TF1) (TF0, TF0, TF0, TF1) (TF0, TF0, TF0, TF1) (TF0, TF0, TF0, TF1) >>>>>>>tfc 6 12 Computed Computed >>>>>>pd (FDD only) N/A N/A N/A >>>>>>βd N/A N/A N/A		-		_	_
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Note	>>>>>>referenceTFCId	_			
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>>>>>>Bd 15 15 N/A N/A N/A N/A >>>>>>FeferenceTFCId 0 0 0 0 0 0 0 0 0	>>>>> gainFactorInform ation	Signalled	Signalled		·
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	>>>>>βd	15	15	N/A	N/A
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		0	0	0	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	>>>>TFCS 3			(TF2, TF1, TF0)	
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	>>>>>gainFactorInform			Computed	Computed
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>>>>>ctfc 6 12 >>>>>pgainFactorInform ation Computed Computed >>>>>>βc (FDD only) N/A N/A >>>>>>βd N/A N/A				(TF0, TF0, TF1)	
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>>>>>βc (FDD only) N/A N/A N/A N/A N/A	>>>>>gainFactorInform			Computed	Computed
>>>>>βd N/A N/A				N/A	N/A
777777					
	>>>>>>referenceTFCId			0	0

>>>>TFCS 5 (TF1, TF0, TF1) (TF1, TF1) >>>>>ctfc 7 13 >>>>>>gainFactorInform Computed Computation >>>>>referenceTFCId 0 0	TF1, TF1,
TF1)	rF1, TF1,
Some as UL Same as UL Sa	TF1, TF1,
ation 0 0 >>>>>>TFCS 6 (TF2, TF1, TF1) (TF2, TF1) >>>>>>ctfc 11 23 >>>>>>painFactorInform ation Signalled Signalled >>>>>>pβc (FDD only) 11 11 >>>>>>pβd 15 15 >>>>>>>referenceTFCId 0 0 dl-CommonTransChInfo 0 0 >tfcs-SignallingMode Same as UL Same as UL PhyCH INFORMATION FDD Same as UL Same as UL UL-DPCH-InfoPredef VII-DPCH-PowerControllnfo Algorithm 1 Algorithm 1 >>powerControlAlgorithm Algorithm 1 Algorithm 1 Algorithm 1 >>tpcStepSize 1 1 1	TF1, TF1,
Separate Signal	led
TF1	led
>>>>>>painFactorInform ation Signalled Signalled >>>>>>βc (FDD only) 11 11 >>>>>>βd 15 15 >>>>>>referenceTFCId 0 0 dl-CommonTransChInfo 0 0 >tfcs-SignallingMode Same as UL Same as UL Same as UL PhyCH INFORMATION FDD FDD FDD UL-DPCH-InfoPredef UI-DPCH-PowerControlInfo Algorithm 1 Algorithm 1 Algorithm 1 >>powerControlAlgorithm Algorithm 1 Algorithm 1 Algorithm 1 Algorithm 1 >>>tpcStepSize 1 1 1 1	
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>>>>>>βd 15 15 >>>>>>>referenceTFCId 0 0 dl-CommonTransChInfo 0 0 >tfcs-SignallingMode Same as UL Same as UL PhyCH INFORMATION FDD FDD Interpretable of the properties of the prope	as UL
>>>>>>referenceTFCId dl-CommonTransChInfo >tfcs-SignallingMode Same as UL PhyCH INFORMATION FDD UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm Algorithm 1 Algorithm 1 Algorithm 1 Algorithm 1 Algorithm 1 1	as UL
di-CommonTransChInfo Same as UL Sam	as UL
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>>tfci-Existence FALSE FALSE FALSE FALSE	<u> </u>
>>pilotBits	
>>positionFixed N/A N/A Fixed Fixed	
PhyCH INFORMATION 3.84 Mcps TDD	
UL-DPCH-InfoPredef	
>ul-DPCH-	
PowerControlInfo	
>>dpch-ConstantValue 0 0 0	
>commonTimeslotInfo	
>>secondInterleavingMode frameRelated frameRelated frameRelated frameRelated	kelated
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	ionPeriod1
PhyCH INFORMATION 1.28 Mcps TDD	
UL-DPCH-InfoPredef	
>commonTimeslotInfo	
>>secondInterleavingMode frameRelated frameRelated frameRelated frameRelated frameRelated	Related
>>tfci-Coding 4 4 16 16	

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech +	12.2 kbps speech +
			3.4 kbps signalling	3.4 kbps signalling
>>puncturingLimit	1	0.64	0.80	0.60
>>repetitionPeriodAndLeng th	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL- CommonInformationPredef				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMod e	frameRelated	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	4	4	16	16
>>>puncturingLimit	1	0.64	0.80	0.60
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS- data + 3.4 kbps signalling	64kbps conv. CS- data + 3.4 kbps signalling	14.4 kbps streaming CS- data +
Dof 24 109	12	1.4	12	3.4 kbps signalling
Ref 34.108 Default configuration	4	14 5	13	7
identity				
RB INFORMATION				
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5			
rlc-InfoChoice	RIc-info	RIc-info	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM			
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3: NoDiscard RB5: N/A			
>>>maxDat	RB1: N/A RB2- RB3: 15 RB5: N/A			
>>transmissionWindowSiz e	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A
>>timerRST	RB1: N/A RB2- RB3: 300 RB5: N/A			
>>max-RST	RB1: N/A RB2- RB3: 1 RB5: N/A			
>>pollingInfo	RB1: N/A RB2- RB3: as below RB5: N/A			
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A RB5: FALSE			
>dl-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM			

Configuration	28.8 kbps conv.	32 kbps conv. CS-	64kbps conv. CS-	14.4 kbps
	CS- data +	data +	data +	streaming CS-
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling	data + 3.4 kbps signalling
>>inSequenceDelivery	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: TRUE	RB2- RB3: TRUE	RB2- RB3: TRUE	RB2- RB3: TRUE
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128 for			
	UEs with more than			
	10 kbyte "total RLC			
	AM buffer size" and			
	32 otherwise RB5: N/A	32 otherwise RB5: N/A	32 otherwise RB5: N/A	32 otherwise RB5: N/A
>>dl-RLC-StatusInfo	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: as below			
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator >>>timerStatusPeriodic	RB2- RB3: FALSE RB2- RB3: 300			
>>sumerstatusPeriodic >>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A
oogmonationinalidation	RB5: FALSE	RB5: FALSE	RB5: FALSE	RB5: FALSE
rb-MappingInfo				
>UL-	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
LogicalChannelMappings >>ul-	Dch	Dch	Dch	Dch
TransportChannelType	Den	Don	Don	Don
>>>transportChannelIdenti	RB1- RB3: 2	RB1- RB3: 2	RB1- RB3: 2	RB1- RB3: 2
ty	RB5: 1	RB5: 1	RB5: 1	RB5: 1
>>logicalChannelIdentity	RB1: 1, RB2: 2,	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
	RB3: 3 RB5: N/A	RB5: N/A	RB3: 3 RB5: N/A	RB3: 3 RB5: N/A
>>rlc-SizeList	RB1- RB3:	RB1- RB3:	RB1- RB3:	RB1- RB3:
	configured	configured	configured	configured
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>mac- LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3			
Logicalonalineir Henry	RB5: 5	RB5: 5	RB5: 5	RB5: 5
>DL-				
logicalChannelMappingList				
>>Mapping option 1	One mapping option	One mapping option	One mapping option	One mapping option
>>>dl- TransportChannelType	Dch	Dch	Dch	Dch
>>>transportChannelIden	RB1- RB3: 2	RB1- RB3: 2	RB1- RB3: 2	RB1- RB3: 2
tity	RB5: 1	RB5: 1	RB5: 1	RB5: 1
>>>logicalChannelIdentity	RB1: 1, RB2: 2,			
	RB3: 3 RB5: N/A	RB3: 3 RB5: N/A	RB3: 3 RB5: N/A	RB3: 3 RB5: N/A
TrCH INFORMATION PER				
TrCH				
UL-				
AddReconfTransChInfoLis t				
>Uplink transport channel	dch	dch	dch	dch
type				
>transportChannelIdentity	TrCH1: 1, TrCH2: 2			
>transportFormatSet	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
>>dynamicTF-information				
>>>tf0/ tf0,1	TrCH1: (0x576,	TrCH1: (0x640,	TrCH1: (0x640,	TrCH1: (0x576,
	1x576, 2x576)	1x640)	2x640)	1x576)
	TrCH2: (0x144, 1x144)	TrCH2: (0x144, 1x144)	TrCH2: (0x144, 1x144)	TrCH2: (0x144, 1x144)
>>>rlcSize	TrCH1: OctetMode	TrCH1: OctetMode	TrCH1: OctetMode	TrCH1: OctetMode
	TrCH2:BitMode	TrCH2:BitMode	TrCH2:BitMode	TrCH2:BitMode

Configuration	28.8 kbps conv. CS- data +	32 kbps conv. CS- data +	64kbps conv. CS- data +	14.4 kbps streaming CS-
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling	data +
>>>>sizeType	TrCH1: type 2,	TrCH1: type 2,	TrCH1: type 2,	3.4 kbps signalling TrCH1: type 2,
31 -	part1= 11, part2= 2	part1= 11, part2= 2	part1= 11, part2= 2	part1= 9,
	(576)	(640)	(640)	part2= 2 (576)
	TrCH2: type 2,	TrCH2: type 2,	TrCH2: type 2,	TrCH2: type 2,
	part1= 2, part2= 0	part1= 2, part2= 0	part1= 2, part2= 0	part1= 2,
	(144)	(144)	(144)	part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: Zero,1, 2 (4) TrCH2: Zero, one	TrCH1: Zero, one TrCH2: Zero, one	TrCH1: Zero, 2 (4) TrCH2: Zero, one	TrCH1: Zero, one, TrCH2: Zero, one
>>>>logicalChannelList	All	All	All	All
>>semiStaticTF- Information				
>>>tti	TrCH1: 40	TrCH1: 20	TrCH1: 20	TrCH1: 40
	TrCH2: 40	TrCH2: 40	TrCH2: 40	TrCH2: 40
>>>channelCodingType	TrCH1: Turbo	TrCH1: Turbo	TrCH1: Turbo	TrCH1: Turbo
	TrCH2:	TrCH2:	TrCH2:	TrCH2:
=	Convolutional	Convolutional	Convolutional	Convolutional
>>>codingRate	TrCH1: N/A	TrCH1: N/A	TrCH1: N/A	TrCH1: N/A
	TrCH2: Third	TrCH2: Third	TrCH2: Third	TrCH2: Third
>>>rateMatchingAttribute	TrCH1: 180	TrCH1: 185	TrCH1: 170	TrCH1: 165
	TrCH2: 160	TrCH2: 160	TrCH2: 160	TrCH2: 160
>>>crc-Size	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16
DL-	TICH2: 16	TICHZ: 16	11CH2: 16	TICHZ: 16
AddReconfTransChInfoLis t				
>Downlink transport	dch	dch	dch	dch
channel type				
>dl- TransportChannelIdentity	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
(should be as for UL)				
>tfs-SignallingMode	SameAsUL	SameAsUL	SameAsUL	SameAsUL
>>transportFormatSet				
>>>dynamicTF-information				
>>>tf0/ tf0,1				
>>>rlcSize				
>>>>sizeType				
>>>>numberOfTbSizeList				
>>>logicalChannelList				
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
>dch-QualityTarget				
>>bler-QualityValue	TrCH1: 2x10 ⁻³	TrCH1: 2x10 ⁻³	TrCH1: 2x10 ⁻³	TrCH1: 1x10 ⁻²
	TrCH2: Absent	TrCH2: Absent	TrCH2: Absent	TrCH2: Absent
TrCH INFORMATION, COMMON				
ul-CommonTransChInfo				
>tfcs-ID (TDD only)	1	1	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE	FALSE
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling
>>explicitTFCS-	Complete	Complete	Complete	Complete
ConfigurationMode	Complete	Complete	Complete	Complete
>>>ctfcSize	Ctfc2Bit	Ctfc2Bit	Ctfc2Bit	Ctfc4Bit
>>>TFCS representation	Addition	Addition	Addition	Addition
>>>>TFCS list	, tadition	7.0010011	, , , , , , , , , , , , , , , , , , , ,	, tadition
>>>>TFCS 1	(TF0, TF0)	(TF0, TF0)	(TF0, TF0)	(TF0, TF0)
>>>>>ctfc	0	0	0	0
>>>>>gainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>referenceTFCId	0	0	0	0
IUIUIUIUUUIU	ı ~	<u> </u>	<u>. ~</u>	

Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS- data + 3.4 kbps signalling	64kbps conv. CS- data + 3.4 kbps signalling	14.4 kbps streaming CS- data +
	3.4 KDPS Signalling	3.4 KDPS Signalling	3.4 Kbps signalling	3.4 kbps signalling
>>>>TFCS 2	(TF1, TF0)	(TF1, TF0)	(TF1, TF0)	(TF1, TF0)
>>>>>ctfc	1	1	1	1
>>>>>gainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>βc (FDD only)	N/A	N/A	N/A	N/A
>>>>>βd	N/A	N/A	N/A	N/A
>>>>>>referenceTFCld	0	0	0	0
>>>>TFCS 3	(TF2, TF0)	(TF0, TF1)	(TF0, TF1)	(TF0, TF1)
>>>>>ctfc	2	2	2	2
>>>>>gainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>referenceTFCId	0	0	0	0
>>>>TFCS 4	(TF0, TF1)	(TF1, TF1)	(TF1, TF1)	(TF1, TF1)
>>>>>ctfc	3	3	3	3
>>>>>gainFactorInform ation	Computed	Signalled	Signalled	Signalled
>>>>>βc (FDD only)	N/A	8	8	11
>>>>>βd	N/A	15	15	15
>>>>>referenceTFCId	0	0	0	0
>>>>TFCS 5	(TF1, TF1)	N/A	N/A	Ü
>>>>>ctfc	4	1.47.1	147.1	
>>>>>gainFactorInform	Computed			
ation				
>>>>>>referenceTFCId	0			
>>>>TFCS 6	(TF2, TF1)	N/A	N/A	
>>>>>ctfc	5			
>>>>>gainFactorInform ation	Signalled			
>>>>>βc (FDD only)	8			
>>>>>βd	15			
>>>>>>referenceTFCld	0			
>>>>TFCS 7				
>>>>>ctfc				
>>>>>gainFactorInform ation				
>>>>>referenceTFCld				
>>>>TFCS 8				
>>>>>ctfc				
>>>>>gainFactorInform ation				
>>>>>referenceTFCId				
>>>>TFCS 9				
>>>>>ctfc				
>>>>>gainFactorInform				
ation				
>>>>>referenceTFCId				
>>>>TFCS 10				
>>>>>ctfc				
>>>>> sgainFactorInform ation				
>>>>>βc (FDD only)				
>>>>>βd				
>>>>>referenceTFCld				
dl-CommonTransChInfo				
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION FDD				
	1		ļ	1

Configuration	28.8 kbps conv. CS- data +	32 kbps conv. CS- data +	64kbps conv. CS- data +	14.4 kbps streaming CS-
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling	data + 3.4 kbps signalling
>ul-DPCH-				
PowerControlInfo				
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize	1	1	1	1
>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>puncturingLimit	0.92	0.8	0.92	1
DL- CommonInformationPrede				
f >dl-DPCH-InfoCommon				
>>spreadingFactor	64	64	32	128
>>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>>pilotBits	8	8	8	8
>>positionFixed	Flexible	Flexible	Flexible	Flexible
PhyCH INFORMATION 3.84 Mcps TDD	TIONIDIO	TIONIDIO	TIONIDIO	TIONIDIO
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo				
>>dpch-ConstantValue	0	0	0	0
>commonTimeslotInfo				
>>secondInterleavingMod e	frameRelated	frameRelated	frameRelated	frameRelated
>>tfci-Coding	16	8	8	8
>>puncturingLimit	0.44	0.8	0.56	0.8
>>repetitionPeriodAndLen	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
gth	,	'	'	'
DL- CommonInformationPrede f				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>secondInterleavingMo	frameRelated	frameRelated	frameRelated	from a Dalata d
>>>secondinterieavingivio de	IrameRelated	IrameRelated	Iramekelaled	frameRelated
>>>tfci-Coding	16	8	8	8
>>>puncturingLimit	0.44	0.64	0.56	0.8
>>>repetitionPeriodAndLe	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
ngth PhyCH INFORMATION 1.28 Mcps TDD				
UL-DPCH-InfoPredef				
>commonTimeslotInfo				
>>secondInterleavingMod e	frameRelated	frameRelated	frameRelated	frameRelated
>>tfci-Coding	16	8	8	8
>>puncturingLimit	0.64	0.60	0.64	1
>>repetitionPeriodAndLen	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
gth	Topolition Gilou	Topolition Glour	Topolition Gnout	Topolition Glour
DL-				
CommonInformationPrede f				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMo de	frameRelated	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	16	8	8	8
>>>puncturingLimit	0.64	0.60	0.64	0.88
>>>repetitionPeriodAndLe	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
ngth				

Configuration	28.8 kbps	57.6 kbps	12.2 kbps
	streaming CS-	streaming CS- data +	speech(multimode) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
Ref 34.108	16	17	1a
Default configuration identity	8	9	10
RB INFORMATION	554 4 556 6	554 4 556 6	DD4 4 DD6 6
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	RIc-info	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3: NoDiscard	RB1: N/A RB2- RB3: NoDiscard	RB1: N/A RB2- RB3: NoDiscard
>>>maxDat	RB5: N/A RB1: N/A	RB5: N/A RB1: N/A	RB5- RB7: N/A RB1: N/A
	RB2- RB3: 15	RB2- RB3: 15	RB2- RB3: 15
transmissismWindowCin	RB5: N/A RB1: N/A	RB5: N/A	RB5- RB7: N/A RB1: N/A
>>transmissionWindowSiz e	RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise	RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise
>>timerRST	RB5: N/A RB1: N/A RB2- RB3: 300 RB5: N/A	RB5: N/A RB1: N/A RB2- RB3: 300 RB5: N/A	RB5- RB7: N/A RB1: N/A RB2- RB3: 300 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1 RB5: N/A	RB1: N/A RB2- RB3: 1 RB5: N/A	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A
>dl-RLC-Mode	RB5: FALSE RB1: UM RB2- RB3: AM	RB5: FALSE RB1: UM RB2- RB3: AM	RB5- RB7: FALSE RB1: UM RB2- RB3: AM
>>inSequenceDelivery	RB5: TM RB1: N/A RB2- RB3: TRUE RB5: N/A	RB5: TM RB1: N/A RB2- RB3: TRUE RB5: N/A	RB5- RB7: TM RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic >>segmentationIndication	RB2- RB3: 300 RB1- RB3: N/A	RB2- RB3: 300 RB1- RB3: N/A	RB2- RB3: 300 RB1- RB3: N/A
>egmentationinulcation	RB5: FALSE	RB5: FALSE	RB5- RB7: FALSE

Configuration	28.8 kbps streaming CS-	57.6 kbps streaming CS-	12.2 kbps speech(multimode
	data + 3.4 kbps signalling	data + 3.4 kbps signalling) + 3.4 kbps signalling
rb-MappingInfo			
>UL- LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
>>ul- TransportChannelType	Dch	Dch	Dch
>>>transportChannelIdenti ty	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5- RB7: N/A
>>mac- LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL- logicalChannelMappingList			
>>Mapping option 1	One mapping option	One mapping option	One mapping option
>>>dl- TransportChannelType	Dch	Dch	Dch
>>>transportChannellden tity	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH			
UL- AddReconfTransChInfoLis t			
>Uplink transport channel type	dch	dch	dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>transportFormatSet	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
>>dynamicTF-information	T-014: (0::570	T-014 (0-570	T::OUA: (0::04)
>>>tf0/ tf0,1	TrCH1: (0x576, 1x576, 2x576) TrCH2: (0x144, 1x144)	TrCH1: (0x576, 1x576, 2x576, 3x576, 4x576) TrCH2: (0x144, 1x144)	TrCH1: (0x81) TrCH2: (0x 103 TrCH3: (0x 60) TrCH4: (0x144)
>>>rlcSize	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode	BitMode
>>>>sizeType	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 81 TrCH2: type 1: 103 TrCH3: type 1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: Zero, one, 2 TrCH2: Zero, one	TrCH1: Zero, one, 2, 3, 4 TrCH2: Zero, one	TrCH1-4: Zero
>>>>logicalChannelList	All	All	All
>>>tf 1			TrCH1: (1x39) TrCH2: (1x53) TrCH3: (1x60) TrCH4: (1x144)

>>>>numberOfTransportBl ocks >>>>TrCH1-3: BitMode TrCH2: 1: 53 TrCH3: 1: 60 TrCH1: 1: 60 TrCH3: 1: 60 TrCH1: 1: 60 TrCH3:	Configuration	28.8 kbps streaming CS- data + 3.4 kbps signalling	57.6 kbps streaming CS- data + 3.4 kbps signalling	12.2 kbps speech(multimode) + 3.4 kbps signalling
ocks >>>>IrCH1-3: BitMode >>>>>sszeType TrCH1: 1: 39 TrCH2: 1: 53 TrCH2: 1: 53 >>>>>logicalChannelList TrCH1-3: One >>>>>logicalChannelList TrCH1-3: One >>>>>>logicalChannelList TrCH1-3: One >>>>>numberOfTransportBl TrCH2: (1x42) oks TrCH2: (1x43) >>>>numberOfTransportBl TrCH1: BitMode >>>>>>>>>>>>>>>>>>>>>>>>>>>>		3.4 kbps signalling	5.4 kbps signalling	3.4 Kbps signalling
System				TrCH1-3: One
Symbol	>>>rlc-Size			TrCH1-3: BitMode
TrCH1: 1: 60	>>>>sizeType			TrCH1: 1: 39
>>>>ImmberOfTbSizeList				
>>>logicalChannelList				
>>>tf 2				
Tr.CH2: (1x83) Tr.CH3: Tr.CH4: N/A Tr.CH1: Concording to the				
ocks TrCH1: BitMode >>>>sizeType TrCH1: type 1: 42 TrCH2: type 1: 63 TrCH1: type 1: 63 >>>>logicalChannelList TrCH1: (1x55) >>>stf 3 TrCH1: (1x55) TrCH2: (1x84) TrCH2: (1x84) TrCH2: TrCH4: N/A TrCH3- TrCH4: N/A TrCH3- TrCH4: N/A TrCH1: type 1: 55 TrCH2: type 1: 84 TrCH1: type 1: 55 TrCH2: type 1: 84 TrCH1: (1x75) >>>>sizeType TrCH1: (1x76) >>>>logicalChannelList TrCH1: (1x75) >>>>numberOfTbSizeList TrCH1: (1x75) >>>>numberOfTransportBl TrCH1: SitMode TrCH1: type 1: 75 TrCH1: type 1: 76 TrCH1: type 1: 76 TrCH1: type 1: 76 TrCH1: type 1: 76 TrCH1: type 1: 103 >>>>numberOfTbSizeList TrCH1: (1x81) >>>>losemiStaticTF- Information TrCH1: type 1: 81 >>>>>>>>>>>>>>semiStaticTF- Information TrCH1: 40 TrCH2: 40				TrCH2: (1x63) TrCH3- TrCH4: N/A
>>>>ric-Size	>>>>numberOfTransportBl			TrCH1-2: One
>>>>sizeType				T 0114 Bitt
TrCH2: type 1: 63				
>>>>numberOfTbSizeList	>>>>size i ype			
>>>>logicalChannelList >>>t1 3 TrCH1: (1x55) TrCH2: (1x84) TrCH3- TrCH4: N/A TrCH3- TrCH4: N/A TrCH3- TrCH4: N/A TrCH3- TrCH4: N/A TrCH1-2: Zero Oks >>>>rocks TrCH1: BitMode TrCH1: type 1: 55 TrCH2: type 1: 84 TrCH1: 2: One >>>>logicalChannelList TrCH1: lill >>>t4 TrCH1-2: One TrCH1: lill TrCH1: (1x75) TrCH2: (1x103) TrCH3- TrCH4: N/A TrCH1-2: One TrCH1: lill TrCH	>>>>numberOfThSizeList			
>>>ff 3				
TrCH2: (1x84) TrCH3: TrCH4: N/A TrCH3: TrCH4: N/A TrCH3: TrCH4: N/A TrCH3: TrCH4: N/A TrCH1: Zero TrCH1: BitMode TrCH1: type 1: 55 TrCH2: type 1: 84 TrCH1: 2: One TrCH1: 3 TrCH1: 3 TrCH1: 4 TrCH3: 3 TrCH3: 4 TrCH3: 3 TrCH3: 4 TrCH3: 3 TrCH3: 1 T				
>>>>numberOfTransportBl ocks TrCH1: BitMode >>>>sizeType TrCH1: type 1: 55 TrCH2: type 1: 55 TrCH2: type 1: 84 >>>>numberOfTbSizeList TrCH1: all >>>>tf 4 TrCH1: all >>>tf 4 TrCH1: (1x75) TrCH2: (1x103) TrCH2: (1x103) TrCH2: (1x103) TrCH2: (1x103) TrCH2: (1x103) TrCH2: TrCH4: N/A >>>>numberOfTransportBl ocks TrCH1-2: One >>>>sizeType TrCH1: BitMode >>>>sizeType TrCH1: type 1: 75 TrCH2: type 1: 76 TrCH2: type 1: 76 TrCH2: type 1: 76 TrCH2: type 1: 77 TrCH2: TrCH2: type 1: 81 TrCH1: all >>>>logicalChannelList TrCH1: (1x81) TrCH2: type 1: 81 TrCH1: One >>>>>>numberOfTbSizeList TrCH1: type 1: 81 TrCH1: type 1: 81 TrCH1: all >>>>numberOfTbSizeList TrCH1: all >>>>numberOfTbSizeList TrCH1: type 1: 81 TrCH1: One >>>>numberOfTbSizeList TrCH1: All TrCH1: 40 TrCH1: All				TrCH2: (1x84)
ocks TrCH1: BitMode >>>>sizeType TrCH1: type 1: 55 TrCH2: type 1: 84 TrCH1: type 1: 84 >>>>numberOfTbSizeList TrCH1: (1x75) >>>tf 4 TrCH1: (1x75) TrCH2: (1x103) TrCH2: (1x103) TrCH3- TrCH4: N/A TrCH1: BitMode >>>>numberOfTransportBl ocks TrCH1: type 1: 75 >>>rlc-Size TrCH1: type 1: 75 TrCH1: type 1: 75 TrCH2: type 1: 103 >>>numberOfTbSizeList TrCH1: (1x81) >>>stf 5 TrCH1: (1x81) TrCH1: 1(1x81) TrCH2: TrCH4: N/A >>>sizeType TrCH1: Green >>>sizeType TrCH1: 1x10 >>>sizeType TrCH1: Green >>>sizeType TrCH1: BitMode >>>sizeType TrCH1: Green >>>sizeType TrCH1: Green >>>sizeType TrCH1: Green >>>sizeType TrCH1: Green >>>semiStaticTF- TrCH1: Green Information TrCH1: 40 TrCH1: 40 TrCH2: 40 TrCH2: 40 TrCH2: 40 TrCH2: 40				
>>>sizeType				TrCH1-2: Zero
>>>>sizeType TrCH1: type 1: 55 TrCH2: type 1: 84 >>>numberOfTbSizeList TrCH1-2: One >>>stf 4 TrCH1: all TrCH1: all TrCH1: (1x75) TrCH2: (1x103) TrCH3- TrCH4: N/A >>>numberOfTransportBl ocks TrCH1-2: One >>>sizeType TrCH1: BitMode TrCH1: type 1: 75 TrCH2: type 1: 103 >>>sizeType TrCH1: BitMode >>>sizeType 1: 103 TrCH1: type 1: 75 TrCH2: type 1: 103 TrCH1: Cone TrCH1: all >>>sizeType 1: 103 TrCH1: (1x81) TrCH2: TrCH4: N/A TrCH1: One TrCH1: One TrCH1: One TrCH1: Urbe TrCH1: Urbe TrCH1: all >>>sizeType TrCH1: Urbe TrCH1: all >>>numberOfTbSizeList TrCH1: Urbe TrCH1: all >>>numberOfTbSizeList TrCH1: Urbe TrCH1: all >>>semiStaticTF-Information TrCH1: A0 TrCH1: A0 TrCH1: Turbe TrCH2: A0 TrCH2: A0 TrCH2: A0 TrCH4: A0 >>>channelCodingType TrCH1: N/A TrCH1: Turbe TrCH2: TrCH2: Convolutional TrCH1: TrCH2: Third TrCH2: 190 TrCH2: 160 TrCH2: 1	0.0110			TrCH1: BitMode
TrCH2: type 1: 84				
>>>numberOfTbSizeList >>>stf 4 TrCH1: (1x75) TrCH2: (1x103) TrCH3: TrCH4: N/A TrCH3: TrCH4: N/A >>>>numberOfTransportBl ocks >>>sizeType TrCH1: (1x81) >>>stf 5 TrCH1: (1x81) TrCH1: BitMode TrCH1: 2: One >>>slogicalChannelList TrCH1: Liype 1: 75 TrCH2: type 1: 103 TrCH1: all >>>tf 5 TrCH1: Cone >>>stf 5 TrCH1: Cone TrCH1: BitMode TrCH1: All >>>tf 5 TrCH1: TrCH1: All >>>stf 5 TrCH1: TrCH1: All >>>stf 5 TrCH1: TrCH1: BitMode TrCH1: All >>>stf 5 TrCH1: TrCH1: All >>>stf 5 TrCH1: TrCH1: All >>>stf 5 TrCH1: TrCH1: All >>>sizeType TrCH1: All >>>sizeType TrCH1: TrCH1: All >>>stf i TrCH1: All TrCH1: TrCH2: All TrCH1: TrCH3: All TrCH4: TrCH2: TrCH2: TrCH2: TrCH2: TrCH3: All TrCH3: All TrCH4: Third TrCH3: 235				
>>>tf 4 TrCH1: (1x75) TrCH2: (1x103) TrCH3: TrCH4: N/A TrCH3: TrCH4: N/A TrCH3- TrCH4: N/A TrCH1-2: One	>>>>numberOfTbSizeList			
TrCH2: (1x103) TrCH3- TrCH4: N/A TrCH3- TrCH3- TrCH4: N/A TrCH3- TrCH	>>>>logicalChannelList			TrCH1: all
>>>numberOfTransportBl ocks >>>>rlc-Size >>>sizeType TrCH1: BitMode TrCH1: type 1: 75 TrCH2: type 1: 103 >>>slogicalChannelList >>>t 5 TrCH1: all >>>rlcH1: nrcH1: N/A TrCH1: One TrCH1: litMode TrCH1: One TrCH1: One TrCH1: One TrCH1: One TrCH1: One TrCH1: litMode TrCH1: litMo				
>>>>numberOfTransportBI ocks TrCH1: BitMode >>>>sizeType TrCH1: type 1: 75 TrCH2: type 1: 103 >>>>numberOfTbSizeList TrCH1-2: One >>>>logicalChannelList TrCH1: (1x81) TrCH2: TrCH4: N/A >>>>InumberOfTransportBI ocks TrCH1: One >>>>sizeType TrCH1: BitMode >>>>sizeType TrCH1: type 1: 81 >>>>numberOfTbSizeList TrCH1: one >>>sizeType TrCH1: One >>>>sizeType TrCH1: do >>>numberOfTbSizeList TrCH1: do >>>semiStaticTF-Information TrCH2: 40 TrCH1: 40 TrCH1: 40 TrCH1: 40 TrCH4: 40 >>>channelCodingType TrCH1: Turbo TrCH2: 40 TrCH4: 40 TrCH2: 40 TrCH2: 40 TrCH4: 40 TrCH2: Third TrCH1: TrCH2: Third TrCH1: N/A TrCH2: Third TrCH1: TrCH2: Third TrCH3: Half TrCH4: Third TrCH4: Third TrCH4: Third TrCH2: 160 TrCH2: 190 TrCH3: 235 TrCH3: 235				
ocks TrCH1: BitMode >>>>sizeType TrCH1: type 1: 75 TrCH2: type 1: 103 >>>numberOfTbSizeList TrCH1: 2: One >>>slogicalChannelList TrCH1: (1x81) TrCH1: (1x81) TrCH2- TrCH4: N/A >>>numberOfTransportBl ocks TrCH1: BitMode >>>sizeType TrCH1: BitMode >>>sizeType TrCH1: One >>>solgicalChannelList TrCH1: One >>>sizeType TrCH1: One >>>sosemiStaticTF- Information TrCH1: 40 TrCH2: 40 TrCH1: all >>>channelCodingType TrCH1: Turbo TrCH2: 40 TrCH2: 40 TrCH2: 40 TrCH2: Third Convolutional >>>convolutional Convolutional TrCH1: TrCH2: Third >>>convolutional TrCH1: N/A TrCH2: Third TrCH1: TrCH2: Third TrCH3: Half TrCH4: Third >>>rateMatchingAttribute TrCH1: 155 TrCH2: 160 TrCH2: 160 TrCH2: 160 TrCH2: 190 TrCH3: 235	L O/T			
>>>>sizeType TrCH1: type 1: 75	ocks			
TrCH2: type 1: 103				
>>>>numberOfTbSizeList TrCH1-2: One >>>>logicalChannelList TrCH1: all >>>stf 5 TrCH1: (1x81) TrCH2- TrCH4: N/A >>>>numberOfTransportBl ocks TrCH1: One >>>>rlc-Size TrCH1: BitMode >>>>sizeType TrCH1: type 1: 81 >>>numberOfTbSizeList TrCH1: One >>>logicalChannelList TrCH1: 40 >>>semiStaticTF- Information TrCH2: 40 TrCH2: 40 >>>tti TrCH2: 40 TrCH2: 40 TrCH4: 40 >>>channelCodingType TrCH1: Turbo TrCH2: TCH2: TCH2: Convolutional Convolutional Convolutional >>>>codingRate TrCH1: N/A TrCH2: Third TrCH1: N/A TrCH2: Third TrCH1: TCH2: Third TrCH4: Third >>>rateMatchingAttribute TrCH1: 155 TrCH2: 160 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH3: 235	>>>>size i ype			
>>>tf 5	>>>>numberOfTbSizeList			TrCH1-2: One
TrCH2- TrCH4: N/A				
>>>>numberOfTransportBl ocks TrCH1: One >>>>rlc-Size TrCH1: BitMode >>>>sizeType TrCH1: type 1: 81 >>>>numberOfTbSizeList TrCH1: One >>>>logicalChannelList TrCH1: 40 >>semiStaticTF- Information TrCH1: 40 TrCH1: 40 TrCH2: 40 TrCH2: 40 TrCH4: 40 >>>channelCodingType TrCH1: Turbo TrCH2: TrCH2: 40 Convolutional >>>>codingRate TrCH1: N/A TrCH1: N/A TrCH2: Third TrCH1: N/A TrCH2: Third TrCH3: Half TrCH4: Third >>>rateMatchingAttribute TrCH1: 155 TrCH2: 160 TrCH1: 145 TrCH2: 190 TrCH2: 190 TrCH3: 235	>>>tf 5			
ocks TrCH1: BitMode >>>>rlc-Size TrCH1: BitMode >>>>sizeType TrCH1: type 1: 81 >>>numberOfTbSizeList TrCH1: One >>>>logicalChannelList TrCH1: all >>semiStaticTF- Information TrCH1: 40				
>>>>sizeType TrCH1: type 1: 81 >>>numberOfTbSizeList TrCH1: One >>>slogicalChannelList TrCH1: all >>semiStaticTF- Information TrCH1: 40	ocks			
>>>>numberOfTbSizeList TrCH1: One >>>>logicalChannelList TrCH1: all >>semiStaticTF- Information TrCH1: 40				
>>>>logicalChannelList TrCH1: all >>semiStaticTF- Information TrCH1: 40				
>>semiStaticTF- Information TrCH1: 40 TrCH2: 40 TrCH1: 40 TrCH2: 40 TrCH1: Turba TrCH4: 40 Convolutional Convolutional Convolutional TrCH2: TrCH2: TrCH2: TrCH2: TrCH2: TrCH2: TrCH2: TrCH2: TrCH2: Third TrCH1: N/A TrCH2: Third TrCH3: Half TrCH3: Half TrCH4: Third >>>rateMatchingAttribute TrCH1: 155 TrCH1: 145 TrCH2: 160 TrCH1: 200 TrCH2: 190 TrCH3: 235				
Information				TIC⊓T. äll
>>>tti TrCH1: 40 TrCH2: 40 TrCH1: 40 TrCH2: 40 TrCH1- TrCH3: 20 TrCH4: 40 >>>channelCodingType TrCH1: Turbo TrCH2: Convolutional TrCH1: Turbo TrCH2: Convolutional Convolutional >>>>codingRate TrCH1: N/A TrCH2: Third TrCH1: N/A TrCH2: Third TrCH1- TrCH2: Third >>>rateMatchingAttribute TrCH1: 155 TrCH2: 160 TrCH1: 145 TrCH2: 160 TrCH1: 200 TrCH2: 190 TrCH3: 235				
>>>channelCodingType TrCH1: Turbo TrCH2: Convolutional TrCH1: Turbo TrCH2: Convolutional Convolutional >>>>codingRate TrCH1: N/A TrCH2: Third TrCH1: N/A TrCH2: Third TrCH1: TrCH2: Third TrCH3: Half TrCH4: Third >>>rateMatchingAttribute TrCH1: 155 TrCH2: 160 TrCH1: 145 TrCH2: 160 TrCH1: 200 TrCH2: 190 TrCH3: 235				
TrCH2: TrCH2: Convolutional >>>>codingRate TrCH1: N/A TrCH2: Third TrCH1: N/A TrCH2: Third TrCH1: N/A TrCH2: Third TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH4: Third TrCH1: 145 TrCH2: 160 TrCH1: 200 TrCH2: 190 TrCH3: 235	>>>channelCodingType			
>>>>codingRate TrCH1: N/A TrCH2: Third TrCH1: N/A TrCH2: Third TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third >>>rateMatchingAttribute TrCH1: 155 TrCH2: 160 TrCH1: 145 TrCH2: 160 TrCH1: 190 TrCH3: 235	3.77.	TrCH2:	TrCH2:	
TrCH2: Third	>>>>codingRate			TrCH1- TrCH2·
>>>rateMatchingAttribute				
>>>rateMatchingAttribute				=
TrCH2: 160 TrCH2: 160 TrCH3: 235				
TrCH3: 235	>>>rateMatchingAttribute			
		TrCH2: 160	1rCH2: 160	
				TrCH3: 235 TrCH4: 160

Configuration	28.8 kbps	57.6 kbps	12.2 kbps
	streaming CS- data +	streaming CS- data +	speech(multimode) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>>crc-Size	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16	TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16
DL- AddReconfTransChInfoLis t			
>Downlink transport channel type	dch	dch	dch
>dl- TransportChannelIdentity (should be as for UL)	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>tfs-SignallingMode	SameAsUL	SameAsUL	Independent <only and="" below="" different="" is="" on="" shown="" tf0="" trch1=""></only>
>>transportFormatSet			DedicatedTransChT FS
>>>dynamicTF-information			T 0114 (4.5)
>>>tf0/tf0,1			TrCH1: (1x0)
>>>rlcSize			bitMode
>>>>sizeType >>>numberOfTbSizeList			TrCH1: type 1: 0 TrCH1: One
>>>logicalChannelList			All
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>dch-QualityTarget			,
>>bler-QualityValue	TrCH1: 1x10 ⁻² TrCH2: Absent	TrCH1: 1x10 ⁻² TrCH2: Absent	TrCH1: 7x10 ⁻³ TrCH2- TrCH4: Absent
TrCH INFORMATION, COMMON			
ul-CommonTransChInfo			
>tfcs-ID (TDD only)	1	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE
>tfc-Subset			Absent, not required
>ul-TFCS	Normal TFCI	Normal TFCI	Normal TFCI
	signalling	signalling	signalling
>>explicitTFCS- ConfigurationMode	Complete	Complete	Complete
>>>ctfcSize	Ctfc4Bit Addition	Ctfc4Bit	Ctfc8Bit Addition
>>>TFCS representation >>>>TFCS list	AuditioH	Addition	Auditioff
>>>>TFCS 1	(TF0, TF0)	(TF0, TF0)	(TF0, TF0, TF0, TF0)
>>>>>ctfc	0	0	0
>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>referenceTFCld	0	0	0
>>>>TFCS 2	(TF1, TF0)	(TF1, TF0)	(TF1, TF0, TF0, TF0)
>>>>>ctfc	1	1	1
>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>βc (FDD only)	N/A	N/A	N/A
>>>>>βd	N/A	N/A	N/A
>>>>>referenceTFCId	0	0	0
>>>>TFCS 3	(TF2, TF0)	(TF2, TF0)	(TF2, TF1, TF0, TF0)
>>>>>ctfc	2	2	8

Configuration	28.8 kbps	57.6 kbps	12.2 kbps
	streaming CS- data +	streaming CS- data +	speech(multimode) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>referenceTFCld	0	0	0
>>>>TFCS 4	(TF0, TF1)	(TF3, TF0)	(TF3, TF2, TF0, TF0)
>>>>>ctfc	3	3	15
>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>βc (FDD only)	N/A	N/A	N/A
>>>>>βd	N/A	N/A	N/A
>>>>>>referenceTFCId	0	0	0
>>>>>TFCS 5	(TF1, TF1)	(TF4, TF0)	(TF4, TF3, TF0, TF0)
>>>>>ctfc	4	4	22
>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>referenceTFCld	0	0	0
>>>>>TFCS 6	(TF2, TF1)	(TF0, TF1)	(TF5, TF4, TF1, TF0)
>>>>>ctfc	5	5	59
>>>>>gainFactorInform ation	Signalled	Computed	Computed
>>>>>βc (FDD only)	8	N/A	N/A
>>>>>βd	15	N/A	N/A
>>>>>referenceTFCld	0	0	0
>>>>TFCS 7		(TF1, TF1)	(TF0,TF0,TF0,TF1)
>>>>>ctfc		6	60
>>>>> sgainFactorInform ation		Computed	Computed
>>>>>referenceTFCld		0	0
>>>>TFCS 8		(TF2, TF1)	(TF1,TF0,TF0,TF1)
>>>>>ctfc >>>>>gainFactorInform		Computed	61 Computed
ation		Computed	Computed
>>>>>>referenceTFCld		0	0
>>>>TFCS 9		(TF3, TF1)	(TF2,TF1,TF0,TF1)
>>>>>ctfc		8	68
>>>>>gainFactorInform ation		Computed	Computed
>>>>>referenceTFCld		0	0
>>>>TFCS 10		(TF4, TF1)	(TF3,TF2,TF0,TF1)
>>>>>CtfC		9 Cignallad	75 Computed
>>>>>gainFactorInform ation		Signalled	Computed
>>>>>βc (FDD only)		8	N/A
>>>>>βd		15	N/A
>>>>>referenceTFCId		0	(TE / TEO TEO TE /)
>>>>>TFCS 11 >>>>>ctfc			(TF4,TF3,TF0,TF1) 82
>>>>>gainFactorInform ation			Computed
>>>>>>referenceTFCld			0
>>>>TFCS 12			(TF5,TF4,TF1,TF1)
>>>>>ctfc			119
>>>>>gainFactorInform ation			Signalled
>>>>>βc (FDD only)			11
>>>>>βd			15
>>>>>>referenceTFCld			0

Configuration	28.8 kbps streaming CS- data +	57.6 kbps streaming CS- data +	12.2 kbps speech(multimode) +	
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling	
dl-CommonTransChInfo				
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL	
PhyCH INFORMATION FDD				
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo	A Leve with use 4	A large with the d	A Les e with see . 4	
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1	
>>>tpcStepSize >tfci-Existence	TRUE	TRUE	TRUE	
>puncturingLimit	1	1	0.88	
DL-	1	I	0.00	
CommonInformationPrede f				
>dl-DPCH-InfoCommon				
>>spreadingFactor	64	32	128	
>>tfci-Existence	TRUE	TRUE	FALSE	
>>pilotBits	8	8	4	
>>positionFixed	Flexible	Flexible	Fixed	
PhyCH INFORMATION 3.84 Mcps TDD				
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo				
>>dpch-ConstantValue	0	0	0	
>commonTimeslotInfo				
>>secondInterleavingMod e	frameRelated	frameRelated	frameRelated	
>>tfci-Coding	16	16	16	
>>puncturingLimit	0.44	0.48	0.88	
>>repetitionPeriodAndLen gth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	
DL-				
CommonInformationPrede f				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMo de	frameRelated	frameRelated	frameRelated	
>>>tfci-Coding	16	16	16	
>>>puncturingLimit	0.44	0.48	0.92	
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	
PhyCH INFORMATION 1.28 Mcps TDD				
UL-DPCH-InfoPredef				
>commonTimeslotInfo				
>>secondInterleavingMod e	frameRelated	frameRelated		
>>tfci-Coding	16	16		
>>puncturingLimit	0.64	0.72		
>>repetitionPeriodAndLen gth	repetitionPeriod1	repetitionPeriod1		
DL- CommonInformationPrede f				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMo	frameRelated	frameRelated	frameRelated	
de				

Configuration	28.8 kbps streaming CS- data + 3.4 kbps signalling	57.6 kbps streaming CS- data + 3.4 kbps signalling	12.2 kbps speech(multimode) + 3.4 kbps signalling
>>>tfci-Coding	16	16	16
>>>puncturingLimit	0.64	0.72	0.92
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

Configuration	10.2/6.7/5.9/4.75 kbps speech + 3.4 kbps signalling	7.4/6.7/5.9/4.75 kbps speech + 3.4 kbps signalling
Ref 34.108	N/A	N/A
Default configuration identity	11	12
RB INFORMATION		
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7, RB8: 8	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5-RB7: TM	RB1: UM RB2- RB3: AM RB5-RB6: TM
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A	RB1: N/A RB2- RB3: NoDiscard RB5- RB6: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15 RB5- RB7: N/A	RB1: N/A RB2- RB3: 15 RB5- RB6: N/A
>>transmissionWindowSiz e	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB6: N/A
>>timerRST	RB1: N/A RB2- RB3: 300 RB5- RB7: N/A	RB1: N/A RB2- RB3: 300 RB5- RB6: N/A
>>max-RST	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A	RB1: N/A RB2- RB3: 1 RB5- RB6: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below RB5- RB7: N/A	RB1: N/A RB2- RB3: as below RB5- RB6: N/A
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll		RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A RB5- RB7: FALSE	RB1- RB3: N/A RB5- RB6: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM RB5- RB7: TM RB8: TM	RB1: UM RB2- RB3: AM RB5- RB6: TM RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE RB5- RB8: N/A	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB8: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below RB5- RB8: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 300

>>segmentationIndication	RB1- RB3: N/A RB1- RB3: N/A RB5- RB8: FALSE RB5- RB7: FALS	
rb-MappingInfo	ND3- ND0. FALSE	NDS- NDT. FALSE
>UL-	OneLogicalChannel	OneLogicalChannel
LogicalChannelMappings	ono Logicarona mior	Ono Logical Ona mior
>>ul-	Dch	Dch
TransportChannelType		
>>>transportChannelIdentit	RB1- RB3: 4	RB1- RB3: 3
у	RB5: 1, RB6: 2,	RB5: 1, RB6: 2
	RB7: 3,	
>>logicalChannelIdentity	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
	RB3: 3	RB3: 3
>>rlc-SizeList	RB5- RB7: N/A RB1- RB3:	RB5- RB6: N/A RB1- RB3:
>>IIC-SizeList	configured	configured
	RB5- RB7: N/A	RB5- RB6: N/A
>>mac-	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
LogicalChannelPriority	RB3: 3	RB3: 3
	RB5- RB7: 5	RB5- RB6: 5
>DL-		
logicalChannelMappingList		
>>Mapping option 1	One mapping option	One mapping option
>>>dl-	Dch	Dch
TransportChannelType	DD4 DD0 4	DD4 DD0 0
>>>>transportChannellden	RB1- RB3: 4	RB1- RB3: 3
tity	RB5: 1, RB6: 2,	RB5: 1, RB6: 2,
>>>logicalChannelIdentity	RB7: 3, RB8: 5 RB1: 1, RB2: 2,	RB7:4 RB1: 1, RB2: 2,
>>>iogicalCriailileildeillity	RB3: 3	RB3: 3
	RB5- RB8: N/A	RB5- RB7: N/A
TrCH INFORMATION PER	1120 1120111,71	
TrCH		
UL-		
AddReconfTransChInfoList		
>Uplink transport channel type	dch	dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 2,	TrCH1: 1, TrCH2: 2,
	TrCH3: 3, TrCH4: 4	TrCH3: 3
>transportFormatSet	DedicatedTransChT	DedicatedTransChT
	FS	FS
>>dynamicTF-information		
>>>tf0/ tf0,1	TrCH1: (0x65)	TrCH1: (0x61)
	TrCH2: (0x 99)	TrCH2: (0x 87)
	TrCH3: (0x 40, 1x40)	TrCH3: (0x 144, 1x144)
	TrCH4: (0x144,	1/144)
	1x144)	
>>>rlcSize	BitMode	BitMode
>>>>sizeType	TrCH1: type 1: 65	TrCH1: type 1: 61
]	TrCH2: type 1: 99	TrCH2: type 1: 87
	TrCH3: type 1: 40	TrCH3: 2: type 2,
	TrCH4: 2: type 2,	part1= 2, part2= 0
	part1= 2, part2= 0	(144)
>>> numberOfThO:1 :	(144) TrCH1-2: Zero	TrCU1 2: 70rc
>>>>numberOfTbSizeList	TrCH1-2: Zero TrCH3-4: Zero, one	TrCH1-2: Zero TrCH3: Zero, one
>>>>logicalChannelList	All	All
>>>tf 1	TrCH1: (1x39)	TrCH1: (1x39)
	TrCH2: (1x 53)	TrCH2: (1x53)
	TrCH3- TrCH4: N/A	TrCH3: N/A
>>>>numberOfTransportBl	TrCH1: One	TrCH1: One
ocks	TrCH2: One	TrCH2: One
>>>rlc-Size	TrCH1-2: BitMode	TrCH1-2: BitMode
>>>>sizeType	TrCH1: 1: 39	TrCH1: 1: 39
	TrCH2: 1: 53	TrCH1: 1: 53
>>>>numberOfTbSizeList	TrCH1-2: One	TrCH1-2: One

1 1 101 1114	T = 0.14 "	T 0114 "
>>>>logicalChannelList	TrCH1: all	TrCH1: all
>>>tf 2	TrCH1: (1x42)	TrCH1: (1x42)
	TrCH2: (1x63)	TrCH2: (1x63)
L O(T IPI	TrCH3- TrCH4: N/A	TrCH3: N/A
>>>>numberOfTransportBl	TrCH1: One	TrCH1: One
ocks	TrCh2: One	TrCh2: One
>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType	TrCH1: type 1: 42	TrCH1: type 1: 42
>>>>numberOfTbSizeList	TrCH2: type 1: 63 TrCH1: One	TrCH2: type 1: 63 TrCH1: One
>>>>numberOrrbSizeList	TrCH1: One	TrCH1: One
>>>>logicalChannelList	TrCH1: all	TrCH1: all
>>>>logicalCriatifieiList	TrCH2: all	TrCH2: all
>>>tf 3	TrCH1: (1x55)	TrCH1: (1x55)
	TrCH2: (1x76)	TrCH2: (1x76)
	TrCH3- TrCH4: N/A	TrCH3: N/A
>>>>numberOfTransportBl	TrCH1: One	TrCH1: One
ocks	TrCh2: One	TrCh2: One
>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType	TrCH1: type 1: 55	TrCH1: type 1: 55
75-	TrCH2: type 1: 76	TrCH2: type 1: 76
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
	TrCH2: One	TrCH2: One
>>>>logicalChannelList	TrCH1: all	TrCH1: all
	TrCH2: all	TrCH2: all
>>>tf 4	TrCH1: (1x58)	TrCH1: (1x58)
	TrCH2: (1x99)	TrCH2: (1x87)
	TrCH3- TrCH4: N/A	TrCH3: N/A
>>>>numberOfTransportBl	TrCH1: One	TrCH1: One
ocks	TrCh2: One	TrCh2: One
>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType	TrCH1: type 1: 58	TrCH1: type 1: 58
	TrCH2: type 1: 99	TrCH2: type 1: 87
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
	TrCH2: One	TrCH2: One
>>>>logicalChannelList	TrCH1: all	TrCH1: all
4.5	TrCH2: all	TrCH2: all
>>>tf 5	TrCH1: (1x65)	TrCH1: (1x61)
>>> numberOfTrenenertPl	TrCH2- TrCH4: N/A TrCH1: One	TrCH2- TrCH4: N/A TrCH1: One
>>>>numberOfTransportBl ocks	TICHT. One	TICHT. One
>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
	TrCH1: type 1: 42	
	1 116/111.1906 1.47	
>>>>sizeType		TrCH1: type 1: 42
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
>>>numberOfTbSizeList >>>>logicalChannelList		
>>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information	TrCH1: One TrCH1: all	TrCH1: One TrCH1: all
>>>>numberOfTbSizeList >>>>logicalChannelList	TrCH1: One TrCH1: all TrCH1- TrCH3: 20	TrCH1: One TrCH1: all TrCH1- TrCH2: 20
>>>numberOfTbSizeList >>>>logicalChannelList >>semistaticTF-Information >>>tti	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40
>>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional
>>>numberOfTbSizeList >>>>logicalChannelList >>semistaticTF-Information >>>tti	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional TrCH1- TrCH2:	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional TrCH1- TrCH2:
>>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional TrCH1- TrCH2: Third
>>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Half	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional TrCH1- TrCH2:
>>>numberOfTbSizeList >>>slogicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType >>>>codingRate	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional TrCH1- TrCH2: Third
>>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Third
>>>numberOfTbSizeList >>>slogicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType >>>>codingRate	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH4: Third TrCH1: 200	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200
>>>numberOfTbSizeList >>>slogicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType >>>>codingRate	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH4: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190
>>>numberOfTbSizeList >>>slogicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType >>>>codingRate	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH4: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 160 TrCH1: 12
>>>numberOfTbSizeList >>>>logicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType >>>>codingRate >>>rateMatchingAttribute	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH4: 190 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH1: 12 TrCH2: 0
>>>numberOfTbSizeList >>>slogicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType >>>codingRate >>>rateMatchingAttribute >>>crc-Size	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH4: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 160 TrCH1: 12
>>>numberOfTbSizeList >>>>logicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType >>>>codingRate >>>rateMatchingAttribute DL-	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH4: 190 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH1: 12 TrCH2: 0
>>>numberOfTbSizeList >>>>logicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType >>>>codingRate >>>rateMatchingAttribute DL- AddReconfTransChInfoList	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH4: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH1: 12 TrCH2: 0 TrCH3: 16
>>>numberOfTbSizeList >>>>logicalChannelList >>>semistaticTF-Information >>>tti >>>channelCodingType >>>>codingRate >>>rateMatchingAttribute DL- AddReconfTransChInfoList >Downlink transport	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH4: 190 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH1: 12 TrCH2: 0
>>>numberOfTbSizeList >>>>logicalChannelList >>>semistaticTF-Information >>>tti >>>channelCodingType >>>>codingRate >>>rateMatchingAttribute DL- AddReconfTransChInfoList >Downlink transport channel type	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH4: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH1: 12 TrCH2: 0 TrCH3: 16
>>>numberOfTbSizeList >>>>logicalChannelList >>>semistaticTF-Information >>>tti >>>channelCodingType >>>>codingRate >>>rateMatchingAttribute DL- AddReconfTransChInfoList >Downlink transport	TrCH1: One TrCH1: all TrCH1- TrCH3: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH4: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16	TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH3: 40 Convolutional TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH1: 12 TrCH2: 0 TrCH3: 16

>tfs-SignallingMode	Independent	Independent
	<only on="" td="" tf0="" trch1<=""><td><only on="" td="" tf0="" trch1<=""></only></td></only>	<only on="" td="" tf0="" trch1<=""></only>
	and tf0/tf1 on	and tf0/tf1 on
	TrCH5 are different	TrCH4 are different
	and shown below>	and shown below>
>>transportFormatSet		
>>>dynamicTF-information		
>>>>tf0/ tf0,1	TrCH1: (1x0)	TrCH1: (1x0)
	TrCH5: (0x3, 1x3)	TrCH4: (0x3, 1x3)
>>>>rlcSize	BitMode	bitMode
>>>>sizeType	TrCH1: type 1: 0	TrCH1: type 1: 0
	TrCH5: type 1: 3	TrCH4: type 1: 3
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
	TrCH5: Zero, one	TrCH4: Zero, one
>>>>logicalChannelList	All	All
>>>semistaticTF-	same as UL except	same as DL except
Information	for TrCH5	for TrCH4
>>>>tti	TrCH5: 20	TrCH4: 20
>>>>channelCodingType	Convolutional	Convolutional
>>>>codingRate	TrCH5: Third	TrCH4: Third
>>>rateMatchingAttribute	TrCH5: 200	TrCH4: 200
>>>crc-Size	TrCH5: 12	TrCH4: 12
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2,	TrCH1: 1, TrCH2: 2,
	TrCH3: 3, TrCH4: 4,	TrCH3: 3
>dch-QualityTarget	, ,	
>>bler-QualityValue	TrCH1: 7x10 ⁻³	TrCH1: 7x10 ⁻³
,	Troug Troug	TrCH1. 7x10
	TrCH2- TrCH5:	Absent
T-CH INCODMATION	Absent	ADSEIIL
TrCH INFORMATION, COMMON		
ul-CommonTransChInfo	1	4
>tfcs-ID (TDD only)		1
>sharedChannelIndicator	FALSE	FALSE
(TDD only)	A1 (; ! !	A1 (
> tfc-Subset	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI	Normal TFCI
	- t 11t	
!:-::TF00	signalling	signalling
>>explicitTFCS-	signalling Complete	Complete
ConfigurationMode	Complete	Complete
ConfigurationMode >>>ctfcSize	Complete Ctfc6Bit	Complete Ctfc6Bit
ConfigurationMode >>>ctfcSize >>>TFCS representation	Complete	Complete
ConfigurationMode >>>ctfcSize >>>TFCS representation >>>>TFC list	Complete Ctfc6Bit Addition	Ctfc6Bit Addition
ConfigurationMode >>>ctfcSize >>>TFCS representation	Complete Ctfc6Bit Addition (TF0, TF0, TF0,	Complete Ctfc6Bit
ConfigurationMode >>>ctfcSize >>>>TFCS representation >>>>TFC list >>>>>TFC 1	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0)	Complete Ctfc6Bit Addition (TF0, TF0, TF0)
ConfigurationMode >>>ctfcSize >>>TFCS representation >>>>TFC list >>>>>TFC 1	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0) 0	Ctfc6Bit Addition (TF0, TF0, TF0)
ConfigurationMode >>>ctfcSize >>>TFCS representation >>>>TFC list >>>>>TFC 1 >>>>>ctfc >>>>>ctfc	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0)	Complete Ctfc6Bit Addition (TF0, TF0, TF0)
ConfigurationMode >>>ctfcSize >>>TFCS representation >>>>TFC list >>>>>TFC 1 >>>>>ctfc >>>>>ctfc	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0) 0 Computed	Complete Ctfc6Bit Addition (TF0, TF0, TF0) 0 Computed
ConfigurationMode >>>ctfcSize >>>TFCS representation >>>>TFC list >>>>>TFC 1 >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>>ctfc >>>>>>referenceTFCId	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0) 0 Computed 0	Complete Ctfc6Bit Addition (TF0, TF0, TF0) Computed 0
ConfigurationMode >>>ctfcSize >>>TFCS representation >>>>TFC list >>>>>TFC 1 >>>>>ctfc >>>>>ctfc	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0,	Complete Ctfc6Bit Addition (TF0, TF0, TF0) 0 Computed
ConfigurationMode >>>ctfcSize >>>TFCS representation >>>>TFC list >>>>>TFC 1 >>>>>ctfc >>>>>TFC 1 >>>>>TFC 1 >>>>>TFC 1	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0, TF0)	Complete Ctfc6Bit Addition (TF0, TF0, TF0) Computed O (TF1, TF0, TF0)
ConfigurationMode >>>ctfcSize >>>>TFCS representation >>>>TFC list >>>>>TFC 1 >>>>>ctfc >>>>>TFC 1 >>>>>>tfc >>>>>>tfc >>>>>>tfc >>>>>>>tfc >>>>>>>tfc >>>>>>>tfc >>>>>>tfc >>>>>>>tfc >>>>>>tfc >>>>>>tfc	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0, TF0) 1	Complete Ctfc6Bit Addition (TF0, TF0, TF0) Computed (TF1, TF0, TF0)
ConfigurationMode >>>ctfcSize >>>>TFCS representation >>>>TFC list >>>>>ctfc >>>>>tfc 1 >>>>>>ctfc >>>>>>tfc 1 >>>>>>tfc 1 >>>>>>>tfc 1 >>>>>>>tfc 2 >>>>>>tfc 2 >>>>>>ctfc >>>>>>tfc 2	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0, TF0)	Complete Ctfc6Bit Addition (TF0, TF0, TF0) Computed O (TF1, TF0, TF0)
ConfigurationMode >>>ctfcSize >>>>TFCS representation >>>>TFC list >>>>>ctfc >>>>>TFC 1 >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>>ctfc	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0, TF0) 1 Computed	Complete Ctfc6Bit Addition (TF0, TF0, TF0) Computed 0 (TF1, TF0, TF0) 1 Computed
ConfigurationMode >>>ctfcSize >>>>TFCS representation >>>>TFC list >>>>>ctfc >>>>>tfc 1 >>>>>>ctfc >>>>>>tfc 1 >>>>>>tfc 1 >>>>>>>tfc 1 >>>>>>>tfc 2 >>>>>>tfc 2 >>>>>>ctfc >>>>>>tfc 2	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0, TF0) Computed 0 (TF1, TF0, TF0, TF0, TF0) 1 Computed N/A	Complete Ctfc6Bit Addition (TF0, TF0, TF0) Computed (TF1, TF0, TF0) 1 Computed N/A
ConfigurationMode >>>ctfcSize >>>>TFCS representation >>>>TFC list >>>>>ctfc >>>>>TFC 1 >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>>ctfc	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0, TF0) 1 Computed	Complete Ctfc6Bit Addition (TF0, TF0, TF0) Computed 0 (TF1, TF0, TF0) 1 Computed
ConfigurationMode >>>ctfcSize >>>TFCS representation >>>>TFC list >>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>>>ctfc >>>>>>>>>>	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0, TF0) Computed 0 (TF1, TF0, TF0, TF0, TF0) 1 Computed N/A	Complete Ctfc6Bit Addition (TF0, TF0, TF0) Computed (TF1, TF0, TF0) 1 Computed N/A
ConfigurationMode >>>ctfcSize >>>TFCS representation >>>>TFC list >>>>>ctfc >>>>>>>ctfc >>>>>ctfc	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0, TF0) 1 Computed N/A N/A 0	Complete Ctfc6Bit Addition (TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0
ConfigurationMode >>>ctfcSize >>>TFCS representation >>>>TFC list >>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>>>ctfc >>>>>>>>>>	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0,	Complete Ctfc6Bit Addition (TF0, TF0, TF0) Computed (TF1, TF0, TF0) 1 Computed N/A
ConfigurationMode >>>ctfcSize >>>TFCS representation >>>>TFC list >>>>>ctfc >>>>>referenceTFCId >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>tfc >>>>>TFC 2	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0, TF0)	Complete Ctfc6Bit Addition (TF0, TF0, TF0) Computed (TF1, TF0, TF0) 1 Computed N/A N/A N/A 0 (TF2, TF1, TF0)
$\begin{array}{lll} & & & \\ & >>> ctfcSize \\ & >>>> TFCS \ representation \\ & >>>> TFC \ list \\ & >>>>> Ctfc \\ & >>>> ctfc \\ & >>>>> ctfc \\ & >>>> ctfc \\ & >> ctfc \\ & >>> ctfc \\ & >>> ctfc \\ & >>> ctfc \\ & >>> ctfc \\ & >> ctfc \\ & >>> ctfc \\ & >> ctfc \\ & > ctfc \\ & >> ctfc \\ & > ctfc \\$	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0, TF0) 8	Complete Ctfc6Bit Addition (TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0)
$\begin{array}{lll} & & & \\ & >>> ctfcSize \\ & >>>> TFCS \ representation \\ & >>>> TFC \ list \\ & >>>>> tfc \ list \\ & >>>> tfc \ list \\ & >>>>> tfc \ list \\ & >>>> tfc \ list \\ & >>>>> tfc \ list \\ & >>>>> tfc \ list \\ & >>>> tfc \ list \\ & >>> tfc \ list \\ & >> tfc \ list \\ & >>> tfc \ list \\ & >>> tfc \ list \\ & >> tfc $	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0, TF0)	Complete Ctfc6Bit Addition (TF0, TF0, TF0) Computed (TF1, TF0, TF0) 1 Computed N/A N/A N/A 0 (TF2, TF1, TF0)
ConfigurationMode >>>ctfcSize >>>TFCS representation >>>>TFC list >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>referenceTFCId >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>TFC 1	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0, TF0) 8 Computed	Complete Ctfc6Bit Addition (TF0, TF0, TF0) Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8 Computed
ConfigurationMode >>>ctfcSize >>>TFCS representation >>>>TFC list >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>TFC 1	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0, TF0) 1 Computed N/A N/A N/A 0 (TF2, TF1, TF0, TF0, TF0) 8 Computed	Complete Ctfc6Bit Addition (TF0, TF0, TF0) Computed (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8 Computed 0
ConfigurationMode >>>ctfcSize >>>TFCS representation >>>>TFC list >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>referenceTFCId >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>TFC 2	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0, TF0) 1 Computed N/A N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0 (TF3, TF2, TF0,	Complete Ctfc6Bit Addition (TF0, TF0, TF0) Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8 Computed
ConfigurationMode >>>ctfcSize >>>TFCS representation >>>>TFC list >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>ctfc >>>>>painFactorInform ation >>>>>>painFactorInform ation >>>>>>pbc (FDD only) >>>>>TFC 3 >>>>>tfc >>>>>ctfc >>>>>>pd >>>>>referenceTFCId >>>>>>pd >>>>>>pctfc >>>>>pd >>>>>referenceTFCId >>>>>>pctfc >>>>>pd >>>>>referenceTFCId >>>>>>>>>>>>>>>>pd >>>>>>>>>>>>>>>>	Complete Ctfc6Bit Addition (TF0, TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0, TF0) 1 Computed N/A N/A N/A 0 (TF2, TF1, TF0, TF0, TF0) 8 Computed	Complete Ctfc6Bit Addition (TF0, TF0, TF0) Computed (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8 Computed 0

>>>>>gainFactorInform ation	Computed	Computed
>>>>>βc (FDD only)		
>>>>>βd		
>>>>>referenceTFCId	0	0
>>>>TFC 5	(TF4, TF3, TF0, TF0)	(TF4, TF3, TF0)
>>>>>ctfc	22	22
>>>>>gainFactorInform	Computed	Computed
>>>>>>referenceTFCId	0	0
>>>>TFC 6	(TF5, TF4, TF1, TF0)	(TF5, TF4, TF0)
>>>>>ctfc	59	29
>>>>>gainFactorInform ation	Computed	Computed
>>>>>βc (FDD only)		
>>>>>βd		
>>>>>>referenceTFCId	0	0
>>>>TFC 7	(TF0, TF0, TF0, TF1)	(TF0, TF0, TF1)
>>>>>ctfc	60	30
>>>>>gainFactorInform ation	Computed	Computed
>>>>>>referenceTFCId	0	0
>>>>TFC 8	(TF1, TF0, TF0, TF1)	(TF1, TF0, TF1)
>>>>>ctfc	61	31
>>>>>gainFactorInform ation	computed	computed
>>>>>βc (FDD only)		
>>>>>βd		
>>>>>referenceTFCId	0	0
>>>>TFC 9	(TF2, TF1, TF0, TF1)	(TF2, TF1, TF1)
>>>>>ctfc	68	38
>>>>>gainFactorInform ation	computed	computed
>>>>>referenceTFCId	0	0
>>>>TFC 10	(TF3, TF2, TF0, TF1)	(TF3, TF2, TF1)
>>>>>ctfc	75	45
>>>>>gainFactorInform ation	computed	computed
>>>>>βc (FDD only)		
>>>>>βd		
>>>>>referenceTFCld	0	0
>>>>TFC 11	(TF4, TF3, TF0, TF1)	(TF4, TF3, TF1)
>>>>>ctfc	82	52
>>>>>gainFactorInform ation	computed	computed
>>>>>>referenceTFCId	0	0
>>>>TFC 12	(TF5, TF4, TF1, TF1)	(TF5, TF4, TF1)
>>>>>ctfc	97	59
>>>>>gainFactorInform ation	signalled	signalled
>>>>>βc (FDD only)	11	11
>>>>>βd	15	15
>>>>>referenceTFCld	0	0
> TFC subset list		
>>TFC subset 1	(speech rate 10.2)	(speech rate 7.4)

	T	
>>> Allowed transport	(TFC1, TFC2,	(TFC1, TFC2,
format combination list	TFC7, TFC8, TFC6,	TFC7, TFC8, TFC6,
TEOh t O	TFC12)	TFC12)
>>TFC subset 2	(speech rate 6.7)	(speech rate 6.7)
>>> Allowed transport format combination list	(TFC1, TFC2,	(TFC1, TFC2,
Tormat combination list	TFC7, TFC8, TFC5, TFC11)	TFC7, TFC8, TFC5, TFC11)
>> TEC subset 2	(speech rate 5.9)	(speech rate 5.9)
>>TFC subset 3 >>> Allowed transport	(TFC1, TFC2,	(TFC1, TFC2,
format combination list	TFC7, TFC8, TFC4,	TFC7, TFC8, TFC4,
Torrial combination list	TFC10)	TFC10)
>>TFC subset 4	(speech rate 4.75)	(speech rate 4.75)
>>> Allowed transport	(TFC1, TFC2,	(TFC1, TFC2,
format combination list	TFC7, TFC8, TFC3,	TFC7, TFC8, TFC3,
	TFC9)	TFC9)
dl-CommonTransChInfo	,	,
>tfcs-SignallingMode	Independent	Independent
ul-CommonTransChInfo		
>tfcs-ID (TDD only)	1	1
>sharedChannelIndicator	FALSE	FALSE
(TDD only)		
> tfc-Subset	Absent, not required	Absent, not required
>dl-TFCS	Normal TFCI	Normal TFCI
	signalling	signalling
>>explicitTFCS-	Complete	Complete
ConfigurationMode		
>>>ctfcSize	Ctfc6Bit	Ctfc6Bit
>>>>TFCS representation	Addition	Addition
>>>>TFCS list	/TE0 TE0 TE0	/TE0 TE0 TE0
>>>>TFC 1	(TF0, TF0, TF0,	(TF0, TF0, TF0,
>>>>>ctfc	TF0, TF0)	TF0)
>>>>>TFC 2	(TF1, TF0, TF0,	(TF1, TF0, TF0,
333331102	TF0, TF0)	TF0)
>>>>>ctfc	1	1
>>>>TFC 3	(TF2, TF1, TF0,	(TF2, TF1, TF0,
	TF0, TF0)	TF0)
>>>>>ctfc	8	8
>>>>TFC 4	(TF3, TF2, TF0,	(TF3, TF2, TF0,
	TF0, TF0)	TF0)
>>>>>ctfc	15	15
>>>>>TFC 5	(TF4, TF3, TF0,	(TF4, TF3, TF0,
	TF0, TF0)	TF0)
>>>>>>ctfc	77	
>>>>>ctfc	22	22
>>>>TFC 6	(TF5, TF4, TF1,	(TF5, TF4, TF0,
>>>>TFC 6	(TF5, TF4, TF1, TF0, TF0)	(TF5, TF4, TF0, TF0)
>>>>>TFC 6	(TF5, TF4, TF1, TF0, TF0) 59	(TF5, TF4, TF0, TF0) 29
>>>>TFC 6	(TF5, TF4, TF1, TF0, TF0) 59 (TF0, TF0, TF0,	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1,
>>>>>TFC 6 >>>>>>tfc >>>>>TFC 7	(TF5, TF4, TF1, TF0, TF0) 59 (TF0, TF0, TF0, TF1, TF0)	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1, TF0)
>>>>>TFC 6 >>>>>>tfc >>>>>>tfc >>>>>>tfc >>>>>>tfc	(TF5, TF4, TF1, TF0, TF0) 59 (TF0, TF0, TF0, TF1, TF0) 60	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1, TF0) 30
>>>>>TFC 6 >>>>>>tfc >>>>>TFC 7	(TF5, TF4, TF1, TF0, TF0) 59 (TF0, TF0, TF0, TF1, TF0) 60 (TF1, TF0, TF0,	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1, TF0)
>>>>>TFC 6 >>>>>>TFC 7 >>>>>>tfc 7 >>>>>>TFC 7	(TF5, TF4, TF1, TF0, TF0) 59 (TF0, TF0, TF0, TF1, TF0) 60	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1, TF0) 30 (TF1, TF0, TF1,
>>>>>TFC 6 >>>>>>tfc >>>>>>tfc >>>>>>tfc >>>>>>tfc	(TF5, TF4, TF1, TF0, TF0) 59 (TF0, TF0, TF0, TF1, TF0) 60 (TF1, TF0, TF0, TF1, TF0) 61	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1, TF0) 30 (TF1, TF0, TF1, TF0) 31
>>>>>TFC 6 >>>>>>tfc >>>>>>TFC 7 >>>>>tfc >>>>>tfc >>>>>tfc >>>>>tfc	(TF5, TF4, TF1, TF0, TF0) 59 (TF0, TF0, TF0, TF1, TF0) 60 (TF1, TF0, TF0, TF1, TF0)	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1, TF0) 30 (TF1, TF0, TF1, TF0)
>>>>>TFC 6 >>>>>>tfc >>>>>>TFC 7 >>>>>tfc >>>>>tfc >>>>>tfc >>>>>tfc	(TF5, TF4, TF1, TF0, TF0, TF0, TF0, TF0, TF0, TF1, TF0) 60 (TF1, TF0, TF0, TF1, TF0, TF1, TF0) 61 (TF2, TF1, TF0,	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1, TF0) 30 (TF1, TF0, TF1, TF0) 31 (TF2, TF1, TF1,
>>>>>TFC 6 >>>>>>tfc >>>>>>tfc >>>>>TFC 7 >>>>>tfc >>>>>tfc >>>>>TFC 8	(TF5, TF4, TF1, TF0, TF0, TF0, TF0, TF0, TF0, TF0, TF1, TF0) 60 (TF1, TF0, TF0, TF0, TF1, TF0) 61 (TF2, TF1, TF0, TF1, TF0, TF1, TF0)	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1, TF0) 30 (TF1, TF0, TF1, TF0) 31 (TF2, TF1, TF1, TF0)
>>>>>TFC 6 >>>>>>tfc >>>>>>TFC 7 >>>>>tfc >>>>>tfc >>>>>tfc >>>>>TFC 7	(TF5, TF4, TF1, TF0, TF0, TF0, TF0, TF0, TF0, TF0, TF1, TF0) 60 (TF1, TF0, TF0, TF0, TF1, TF0) 61 (TF2, TF1, TF0, TF1, TF0, TF1, TF0) 68	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1, TF0) 30 (TF1, TF0, TF1, TF0) 31 (TF2, TF1, TF1, TF0) 37
>>>>>TFC 6 >>>>>>tfc >>>>>>TFC 7 >>>>>tfc >>>>>tfc >>>>>TFC 8 >>>>>TFC 8 >>>>>tfc >>>>>TFC 9 >>>>>TFC 10 >>>>>tfc >>>>>>>>>>>>>>>>>>>>>>>>>>>>>	(TF5, TF4, TF1, TF0, TF0, TF0, TF0, TF0, TF0, TF0, TF1, TF0) 60 (TF1, TF0, TF0, TF0, TF1, TF0) 61 (TF2, TF1, TF0, TF1, TF0, TF1, TF0) 68 (TF3, TF2, TF0, TF1, TF0, TF1, TF0) 75	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1, TF0) 30 (TF1, TF0, TF1, TF0) 31 (TF2, TF1, TF1, TF0) 37 (TF3, TF2, TF1, TF0) 55
>>>>>TFC 6 >>>>>>tfc >>>>>>TFC 7 >>>>>tfc >>>>>tfc >>>>>TFC 8 >>>>>TFC 8 >>>>>tfc >>>>>TFC 9	(TF5, TF4, TF1, TF0, TF0, TF0, TF0, TF0, TF0, TF0, TF1, TF0) 60 (TF1, TF0, TF0, TF0, TF1, TF0) 61 (TF2, TF1, TF0, TF1, TF0, TF1, TF0) 68 (TF3, TF2, TF0, TF1, TF0, TF1, TF0) 75 (TF4, TF3, TF0,	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1, TF0) 30 (TF1, TF0, TF1, TF0) 31 (TF2, TF1, TF1, TF0) 37 (TF3, TF2, TF1, TF0) 55 (TF4, TF3, TF1,
>>>>>TFC 6 >>>>>>tfc >>>>>>TFC 7 >>>>>>tfc >>>>>>tfc >>>>>TFC 8 >>>>>tfc >>>>>tfc >>>>>TFC 9 >>>>>tfc >>>>>tfc >>>>>TFC 10	(TF5, TF4, TF1, TF0, TF0, TF0, TF0, TF0, TF0, TF0, TF1, TF0) 60 (TF1, TF0, TF0, TF0, TF1, TF0) 61 (TF2, TF1, TF0, TF1, TF0, TF1, TF0) 68 (TF3, TF2, TF0, TF1, TF0, TF1, TF0) 75 (TF4, TF3, TF0, TF1, TF0, TF1, TF0)	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1, TF0) 30 (TF1, TF0, TF1, TF0) 31 (TF2, TF1, TF1, TF0) 37 (TF3, TF2, TF1, TF0) 55 (TF4, TF3, TF1, TF0)
>>>>>TFC 6 >>>>>>tfc >>>>>>TFC 7 >>>>>>tfc >>>>>>tfc >>>>>TFC 8 >>>>>tfc >>>>>tfc >>>>>tfc >>>>>TFC 9 >>>>>TFC 10 >>>>>TFC 11 >>>>>>tfc >>>>>tfc >>>>>tfc >>>>>>tfc	(TF5, TF4, TF1, TF0, TF0, TF0, TF0, TF0, TF0, TF0, TF1, TF0) 60 (TF1, TF0, TF0, TF0, TF1, TF0) 61 (TF2, TF1, TF0, TF1, TF0, TF1, TF0) 68 (TF3, TF2, TF0, TF1, TF0, TF1, TF0) 75 (TF4, TF3, TF0, TF1, TF0) 82	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1, TF0) 30 (TF1, TF0, TF1, TF0) 31 (TF2, TF1, TF1, TF0) 37 (TF3, TF2, TF1, TF0) 55 (TF4, TF3, TF1, TF0) 52
>>>>>TFC 6 >>>>>>tfc >>>>>>TFC 7 >>>>>>tfc >>>>>>tfc >>>>>TFC 8 >>>>>tfc >>>>>tfc >>>>>TFC 9 >>>>>tfc >>>>>tfc >>>>>TFC 10	(TF5, TF4, TF1, TF0, TF0, TF0, TF0, TF0, TF0, TF0, TF1, TF0) 60 (TF1, TF0, TF0, TF0, TF1, TF0) 61 (TF2, TF1, TF0, TF1, TF0, TF1, TF0) 68 (TF3, TF2, TF0, TF1, TF0) 75 (TF4, TF3, TF0, TF1, TF0) 82 (TF5, TF4, TF1,	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1, TF0) 30 (TF1, TF0, TF1, TF0) 31 (TF2, TF1, TF1, TF0) 37 (TF3, TF2, TF1, TF0) 55 (TF4, TF3, TF1, TF0) 52 (TF5, TF4, TF1,
>>>>>TFC 6 >>>>>>tfc >>>>>>TFC 7 >>>>>>tfc >>>>>>tfc >>>>>TFC 8 >>>>>tfc >>>>>tfc >>>>>tfc >>>>>TFC 9 >>>>>TFC 10 >>>>>TFC 11 >>>>>>tfc >>>>>tfc	(TF5, TF4, TF1, TF0, TF0, TF0, TF0, TF0, TF0, TF0, TF1, TF0) 60 (TF1, TF0, TF0, TF0, TF1, TF0) 61 (TF2, TF1, TF0, TF1, TF0, TF1, TF0) 68 (TF3, TF2, TF0, TF1, TF0, TF1, TF0) 75 (TF4, TF3, TF0, TF1, TF0) 82	(TF5, TF4, TF0, TF0) 29 (TF0, TF0, TF1, TF0) 30 (TF1, TF0, TF1, TF0) 31 (TF2, TF1, TF1, TF0) 37 (TF3, TF2, TF1, TF0) 55 (TF4, TF3, TF1, TF0) 52

>>>>TFC 13	(TF0, TF0, TF0,	(TF0, TF0, TF0,
	TF0, TF1)	TF1)
>>>>>ctfc	120	60
>>>>TFC 14	(TF1, TF0, TF0,	(TF1, TF0, TF0,
	TF0, TF1)	TF1)
>>>>>ctfc	121	61
>>>>TFC 15	(TF2, TF1, TF0,	(TF2, TF1, TF0,
7777711 0 10	TF0, TF1)	TF1)
	. ,	,
>>>>>ctfc	128	68
>>>>TFC 16	(TF3, TF2, TF0,	(TF3, TF2, TF0,
	TF0, TF1)	TF1)
>>>>>ctfc	135	75
>>>>TFC 17	(TF4, TF3, TF0,	(TF4, TF3, TF0,
	TF0, TF1)	TF1)
>>>>>ctfc	152	82
>>>>TFC 18	(TF5, TF4, TF1,	(TF5, TF4, TF0,
7777711 0 10		TF1)
	TF0, TF1)	,
>>>>>ctfc	189	89
>>>>TFC 19	(TF0, TF0, TF0,	(TF0, TF0, TF1,
	TF1, TF1)	TF1)
>>>>>ctfc	180	90
>>>>TFC 20	(TF1, TF0, TF0,	(TF1, TF0, TF1,
	TF1, TF1)	TF1)
>>>>>ctfc	181	91
>>>>TFC 21	(TF2, TF1, TF0,	(TF2, TF1, TF1,
		TF1)
	TF1, TF1)	,
>>>>>ctfc	188	98
>>>>TFC 22	(TF3, TF2, TF0,	(TF3, TF2, TF1,
	TF1, TF1)	TF1)
>>>>>ctfc	195	105
>>>>TFC 23	(TF4, TF3, TF0,	(TF4, TF3, TF1,
	TF1, TF1)	TF1)
>>>>>ctfc	239	112
>>>>TFC 24	(TF5, TF4, TF1,	(TF5, TF4, TF1,
77777711 0 24	TF1, TF1)	
		TF1)
>>>>>ctfc	218	119
PhyCH INFORMATION		
FDD		
UL-DPCH-InfoPredef		
UL-DPCH-InfoPredef >ul-DPCH-		
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo		
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo	Algorithm 1	Algorithm 1
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm	Algorithm 1	Algorithm 1
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize	1	1
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence	1 TRUE	1 TRUE
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit	1	1
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence	1 TRUE	1 TRUE
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL-	1 TRUE	1 TRUE
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef	1 TRUE	1 TRUE
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon	TRUE 0.88	TRUE 0.88
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor	1 TRUE 0.88	1 TRUE 0.88
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>stpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon	TRUE 0.88	TRUE 0.88
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence	1 TRUE 0.88	1 TRUE 0.88
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence >>pilotBits	1 TRUE 0.88 128 FALSE 4	1 TRUE 0.88 128 FALSE 4
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence	1 TRUE 0.88 128 FALSE	1 TRUE 0.88 128 FALSE
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence >>pilotBits >>positionFixed	1 TRUE 0.88 128 FALSE 4	1 TRUE 0.88 128 FALSE 4
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence >>pilotBits >>positionFixed	1 TRUE 0.88 128 FALSE 4	1 TRUE 0.88 128 FALSE 4
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence >>pilotBits >>positionFixed	1 TRUE 0.88 128 FALSE 4	1 TRUE 0.88 128 FALSE 4
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence >>pilotBits >>positionFixed PhyCH INFORMATION 3.84 Mcps TDD	1 TRUE 0.88 128 FALSE 4	1 TRUE 0.88 128 FALSE 4
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence >>pilotBits >>positionFixed PhyCH INFORMATION 3.84 Mcps TDD UL-DPCH-InfoPredef	1 TRUE 0.88 128 FALSE 4	1 TRUE 0.88 128 FALSE 4
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence >>pilotBits >>positionFixed PhyCH INFORMATION 3.84 Mcps TDD UL-DPCH-InfoPredef >ul-DPCH-	1 TRUE 0.88 128 FALSE 4	1 TRUE 0.88 128 FALSE 4
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence >>pilotBits >>positionFixed PhyCH INFORMATION 3.84 Mcps TDD UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo	1 TRUE 0.88 128 FALSE 4 Fixed	1 TRUE 0.88 128 FALSE 4 Fixed
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence >>pilotBits >>positionFixed PhyCH INFORMATION 3.84 Mcps TDD UL-DPCH-InfoPredef >ul-DPCH-	1 TRUE 0.88 128 FALSE 4	1 TRUE 0.88 128 FALSE 4
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence >>pilotBits >>positionFixed PhyCH INFORMATION 3.84 Mcps TDD UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo	1 TRUE 0.88 128 FALSE 4 Fixed	1 TRUE 0.88 128 FALSE 4 Fixed
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence >>pilotBits >>positionFixed PhyCH INFORMATION 3.84 Mcps TDD UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>dpch-ConstantValue >commonTimeslotInfo	1 TRUE 0.88 128 FALSE 4 Fixed	1 TRUE 0.88 128 FALSE 4 Fixed
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence >>pilotBits >>positionFixed PhyCH INFORMATION 3.84 Mcps TDD UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>dpch-ConstantValue >commonTimeslotInfo >>secondInterleavingMode	1 TRUE 0.88 128 FALSE 4 Fixed 0 frameRelated	TRUE 0.88 128 FALSE 4 Fixed 0
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence >>pilotBits >>positionFixed PhyCH INFORMATION 3.84 Mcps TDD UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>dpch-ConstantValue >commonTimeslotInfo >>secondInterleavingMode >>tfci-Coding	1 TRUE 0.88 128 FALSE 4 Fixed 0 frameRelated 16	TRUE 0.88 128 FALSE 4 Fixed 0 frameRelated 16
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>>tpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence >>pilotBits >>positionFixed PhyCH INFORMATION 3.84 Mcps TDD UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>dpch-ConstantValue >commonTimeslotInfo >>secondInterleavingMode	TRUE 0.88 128 FALSE 4 Fixed 0 frameRelated 16 0.60	TRUE 0.88 128 FALSE 4 Fixed 0 frameRelated 16 0.60
UL-DPCH-InfoPredef >ul-DPCH- PowerControlInfo >>powerControlAlgorithm >>stpcStepSize >tfci-Existence >puncturingLimit DL- CommonInformationPredef >dl-DPCH-InfoCommon >>spreadingFactor >>tfci-Existence >>pilotBits >>positionFixed PhyCH INFORMATION 3.84 Mcps TDD UL-DPCH-InfoPredef >ul-DPCH-InfoPredef >ul-DPCH-PowerControlInfo >>dpch-ConstantValue >commonTimeslotInfo >>secondInterleavingMode >>tfci-Coding >>puncturingLimit	TRUE 0.88 128 FALSE 4 Fixed 0 frameRelated 16 0.60	TRUE 0.88 128 FALSE 4 Fixed 0 frameRelated 16 0.60
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DL-		
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е		
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ngth	•	
PhyCH INFORMATION		
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UL-DPCH-InfoPredef		
>commonTimeslotInfo		
>>secondInterleavingMode	frame Related	frame Related
>>tfci-Coding	16	16
>>puncturingLimit	0.64	0.64
>>repetitionPeriodAndLeng	repetitionPeriod1	repetitionPeriod1
th		
DL-		
CommonInformationPredef		
>dl-DPCH-InfoCommon		
>>commonTimeslotInfo		
>>>secondInterleavingMod	frame Related	frame Related
е		
>>>tfci-Coding	16	16
>>>puncturingLimit	0.64	0.64
>>>repetitionPeriodAndLe	repetitionPeriod1	repetitionPeriod1
ngth		

3GPP TSG-RAN WG2 Meeting #33 Sophia Antipolis, France, 12th-15th November 2002

	CHANGE REQUEST				
*	25.331 CR 1767	≋ rev	- #	Current version:	3 <mark>.12.0</mark> [#]

For <u>HELP</u> on us	ing this form, see bottom of this page or look a	t the pop-up text over the ₩ symbols.
	·	<u></u>
Proposed change at	f fects: UICC apps業 ME X Radi	o Access Network X Core Network
Title: 第	Corrections to Activation time	
Source: #	Ericsson	
Work item code: ₩	TEI	<i>Date:</i> # 13/11/2002
July 11	F	Release: # R99
1	Use <u>one</u> of the following categories: F (correction)	Use <u>one</u> of the following releases: 2 (GSM Phase 2)
	A (corresponds to a correction in an earlier rele	
	B (addition of feature),	R97 (Release 1997)
	C (functional modification of feature)	R98 (Release 1998)
	D (editorial modification)	R99 (Release 1999)
	Detailed explanations of the above categories can	Rel-4 (Release 4)
l t	ne found in 3GPP TR 21.900.	Rel-5 (Release 5)
		Rel-6 (Release 6)
Reason for change:		
	section 8.6.3.1 on activation time. This no	
	activation time can be received in the RR	C CONNECTION SETUP message
	causing the UE to transit from idle to CEI	L_FACH or CELL_DCH state.
	It is assumed that for a UE in idle mode a	
	should also result in UE behaviour unspe	ecified for FDD and be allowed for TDD
	2. 8.2.2.3 Line break is missing	
	3. 8.6.7.19.2a Last three occasions of "se	et the variable" have the wrong
	indentation.	over the variation in many and money
	4. 10.3.7.13 IE group called "Cell for mea	asurement" although it contains several
	cells. The similar group in 10.3.7.33 is co	rrectly called "Cells for measurement".
	5. 14.1.2.3 It is not clear if the cell individ when including cells in the event list of events.	
	_	
	6. 14.3.1.1 CIO _{otherRAT} in formula 2 is not e	explained.
Summary of change	1. Sentence in section 8.6.3.1 modified to	also forbid use of an activation time
Summary or change	other than "now" for the state transition in	
	for FDD and allow it for TDD.	die to arry intro connected mode state
	TOT I DD and allow It for TDD.	
	2. 8.2.2.3 Line break is added before sec	cond "1> In TDD" in the section
	2. U.Z.Z.J LINE DIEAN IS AUGEU DETUTE SEC	

- 3. 8.6.7.19.2a Last three occasions of "set the variable CONFIGURATION_INCOMPLETE to TRUE" is indented and changed to level 6.
- 4. 10.3.7.13 Last IE group name is renamed to "Cells for measurement"
- 5. Sentence added to explicitely state that cell individual offsets should be taken into account.
- 6. 14.3.1.1 $\text{CIO}_{\text{OtherRAT}}$ is added below equation 2 in the same way as below equation 4.

Impact analysis:

1. For FDD the UE implementation is not affected since UE behaviour is unspecified.

For TDD the UE should also for the idle mode to connected mode transition maintain CFN relative to Activation Time specified in RRC procedures. This could be considered an already a known requirement.

UTRAN implementation is not directly affected given activation time other than "now" is utilised.

- 2, 4 No foreseen impact if not implemented in the UE or UTRAN
- 3. Potentially if misinterpreted the UE might reject valid configurations if indentation level is misunderstood.
- 5. Specifications is currently ambigous. If implemented in the UE and not in UTRAN or the opposite the UE will trigger the event at different levels compared to what is assumed by UTRAN.
- 6. Could potentially lead to misinterpreations related to what CIO in the formulas mean, meaning that CIO will not be applied in the formula.

Consequences if not approved:

It could be interpreted that since the idle to CELL_FACH or CELL_DCH state transition is not mentioned in the NOTE, that other values than "now" are allowed to use in the RRC CONNECTION SETUP message for FDD. This would however, lead to unpredicted UE behaviour.

Misunderstandings of intention of the text

Clauses affected:	# 8.2.2.3, 8.6.3.1, 8.6.7.19.2a, 10.3.7.13, 14.1.2.3, 14.3.1.1
	YN
Other specs	★ X Other core specifications ★
affected:	X Test specifications
	X O&M Specifications
Other comments:	*

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.2.2.3 Reception of RADIO BEARER SETUP or RADIO BEARER RECONFIGURATION or RADIO BEARER RELEASE or TRANSPORT CHANNEL RECONFIGURATION or PHYSICAL CHANNEL RECONFIGURATION message by the UE

The UE shall be able to receive any of the following messages:

- RADIO BEARER SETUP message; or
- RADIO BEARER RECONFIGURATION message; or
- RADIO BEARER RELEASE message; or
- TRANSPORT CHANNEL RECONFIGURATION message; or
- PHYSICAL CHANNEL RECONFIGURATION message.

In case the reconfiguration procedure is used to remove all existing RL(s) in the active set while new RL(s) are established the UE shall:

- 1> perform the physical layer synchronisation procedure A as specified in [29] (FDD only);
- 1> apply the hard handover procedure as specified in subclause 8.3.5;
- 1> be able to perform this procedure even if no prior UE measurements have been performed on the target cell and/or frequency.

If the UE receives:

- a RADIO BEARER SETUP message; or
- a RADIO BEARER RECONFIGURATION message; or
- a RADIO BEARER RELEASE message; or
- a TRANSPORT CHANNEL RECONFIGURATION message; or
- a PHYSICAL CHANNEL RECONFIGURATION message:

it shall:

- 1> set the variable ORDERED_RECONFIGURATION to TRUE;
- 1> if the UE will enter the CELL_DCH state from any state other than CELL_DCH state at the conclusion of this procedure:
 - 2> perform the physical layer synchronisation procedure A as specified in [29] (FDD only).
- 1> act upon all received information elements as specified in subclause 8.6, unless specified in the following and perform the actions below.

The UE may first release the physical channel configuration used at reception of the reconfiguration message. The UE shall then:

- 1> in FDD, if the IE "PDSCH code mapping" is included but the IE "PDSCH with SHO DCH Info" is not included and if the DCH has only one link in its active set:
 - 2> act upon the IE "PDSCH code mapping" as specified in subclause 8.6; and
 - 2> infer that the PDSCH will be transmitted from the cell from which the downlink DPCH is transmitted.
- 1> enter a state according to subclause 8.6.3.3.

In case the UE receives a RADIO BEARER RECONFIGURATION message including the IE "RB information to reconfigure" that only includes the IE "RB identity", the UE shall:

- 1> handle the message as if IE "RB information to reconfigure" was absent.
- NOTE: The RADIO BEARER RECONFIGURATION message always includes the IE "RB information to reconfigure". UTRAN has to include it even if it does not require the reconfiguration of any RB.

If after state transition the UE enters CELL_DCH state, the UE shall, after the state transition:

- 1> in FDD; or
- 1> in TDD when "Primary CCPCH Info" is included indicating a new target cell and "New C-RNTI" is not specified:
 - 2> remove any C-RNTI from MAC;
 - 2> clear the variable C_RNTI.

In FDD, if after state transition the UE leaves CELL_DCH state, the UE shall, after the state transition:

- 1> remove any DSCH-RNTI from MAC;
- 1> clear the variable DSCH_RNTI.

If the UE was in CELL_DCH state upon reception of the reconfiguration message and remains in CELL_DCH state, the UE shall:

- 1> if the IE "Uplink DPCH Info" is absent:
 - 2> not change its current UL Physical channel configuration.
- 1> in TDD:
 - 2> if "Primary CCPCH Info" is included indicating a new target cell and "New C-RNTI" is not specified:
 - 3> remove any C-RNTI from MAC;
 - 3> clear the variable C_RNTI.

If after state transition the UE enters CELL_FACH state, the UE shall, after the state transition:

- 1> if the IE "Frequency info" is included in the received reconfiguration message:
 - 2> select a suitable UTRA cell according to [4] on that frequency.
- 1> if the IE "Frequency info" is not included in the received reconfiguration message:
 - 2> select a suitable UTRA cell according to [4].
- 1> if the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selects another cell than indicated by this IE or the received reconfiguration message did not include the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD):
 - 2> initiate a cell update procedure according to subclause 8.3.1 using the cause "Cell reselection";
 - 2> when the cell update procedure completed successfully:
 - 3> if the UE is in CELL_PCH or URA_PCH state:
 - 4> initiate a cell update procedure according to subclause 8.3.1 using the cause "Uplink data transmission";
 - 4> proceed as below.
- 1> start timer T305 using its initial value if timer T305 is not running and if periodical update has been configured by T305 in the IE "UE Timers and constants in connected mode" set to any other value than "infinity" in the variable TIMERS_AND_CONSTANTS;
- 1> select PRACH according to subclause 8.5.17;

- 1> select Secondary CCPCH according to subclause 8.5.19;
- 1> use the transport format set given in system information;
- 1> if the IE "UTRAN DRX cycle length coefficient" is included in the same message:
 - 2> ignore that IE and stop using DRX.
- 1> if the contents of the variable C_RNTI is empty:
 - 2> perform a cell update procedure according to subclause 8.3.1 using the cause "Cell reselection";
 - 2> when the cell update procedure completed successfully:
 - 3> if the UE is in CELL_PCH or URA_PCH state:
 - 4> initiate a cell update procedure according to subclause 8.3.1 using the cause "Uplink data transmission";
 - 4> proceed as below.

If the UE was in CELL_FACH state upon reception of the reconfiguration message and remains in CELL_FACH state, the UE shall:

- 1> if the IE "Frequency info" is included in the received reconfiguration message:
 - 2> select a suitable UTRA cell according to [4] on that frequency;
 - 2> if the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selected another cell than indicated by this IE or the received reconfiguration message did not include the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD):
 - 3> initiate a cell update procedure according to subclause 8.3.1 using the cause "cell reselection";
 - 3> when the cell update procedure completed successfully:
 - 4> proceed as below.

The UE shall transmit a response message as specified in subclause 8.2.2.4, setting the information elements as specified below. The UE shall:

- 1> if the received reconfiguration message included the IE "Downlink counter synchronisation info"; or
- 1> if the received reconfiguration message is a RADIO BEARER RECONFIGURATION and the IE "New U-RNTI" is included:
 - 2> re-establish RB2:
 - 2> set the new uplink and downlink HFN component of COUNT-C of RB2 to MAX(uplink HFN component of COUNT-C of RB2, downlink HFN component of COUNT-C of RB2);
 - 2> increment by one the downlink and uplink values of the HFN component of COUNT-C for RB2;
 - 2> calculate the START value according to subclause 8.5.9;
 - 2> include the calculated START values for each CN domain in the IE "START list" in the IE "Uplink counter synchronisation info".
- 1> if the received reconfiguration message did not include the IE "Downlink counter synchronisation info":
 - 2> if the variable START_VALUE_TO_TRANSMIT is set:
 - 3> include and set the IE "START" to the value of that variable.
 - 2> if the variable START_VALUE_TO_TRANSMIT is not set and the IE "New U-RNTI" is included:
 - 3> calculate the START value according to subclause 8.5.9;

- 3> include the calculated START values for each CN domain in the IE "START list" in the IE "Uplink counter synchronisation info".
- 2> if the received reconfiguration message caused a change in the RLC size for any RB using RLC-AM:
 - 3> calculate the START value according to subclause 8.5.9;
 - 3> include the calculated START values for the CN domain associated with the corresponding RB identity in the IE "START list" in the IE "Uplink counter synchronisation info".
- 1> if the received reconfiguration message contained the IE "Ciphering mode info" or contained the IE "Integrity protection mode info":
 - 2> set the IE "Status" in the variable SECURITY_MODIFICATION for all the CN domains in the variable SECURITY_MODIFICATION to "Affected".
- 1> if the received reconfiguration message contained the IE "Ciphering mode info":
 - 2> include and set the IE "Radio bearer uplink ciphering activation time info" to the value of the variable RB_UPLINK_CIPHERING_ACTIVATION_TIME_INFO.
- 1> if the received reconfiguration message did not contain the IE "Ciphering activation time for DPCH":
 - 2> if prior to this procedure there exist no transparent mode RLC radio bearers for the CN domain indicated in the IE "CN domain identity" in the IE "RAB info":
 - 3> if, at the conclusion of this procedure, the UE will be in CELL_DCH state; and
 - 3> if, at the conclusion of this procedure, at least one transparent mode RLC radio bearer exists for the CN domain indicated in the IE "CN domain identity" in the IE "RAB info":
 - 4> include the IE "COUNT-C activation time" and specify a CFN value for this IE.
- NOTE: UTRAN should not include the IE "Ciphering mode info" in any reconfiguration messages unless it is also used to perform an SRNS relocation with change of ciphering algorithm.
- 1> set the IE "RRC transaction identifier" to the value of "RRC transaction identifier" in the entry for the received message in the table "Accepted transactions" in the variable TRANSACTIONS; and
- 1> clear that entry;
- 1> if the variable PDCP_SN_INFO is not empty:
 - 2> include the IE "RB with PDCP information list" and set it to the value of the variable PDCP_SN_INFO.
- 1> in TDD, if the procedure is used to perform a handover to a cell where timing advance is enabled, and the UE can calculate the timing advance value in the new cell (i.e. in a synchronous TDD network):
 - 2> set the IE "Uplink Timing Advance" according to subclause 8.6.6.26.
- 1> if the IE "Integrity protection mode info" was present in the received reconfiguration message:
 - 2> start applying the new integrity protection configuration in the uplink for signalling radio bearer RB2 from and including the transmitted response message.

If after state transition the UE enters CELL_PCH or URA_PCH state, the UE shall, after the state transition and transmission of the response message:

- 1> if the IE "Frequency info" is included in the received reconfiguration message:
 - 2> select a suitable UTRA cell according to [4] on that frequency.
- 1> if the IE "Frequency info" is not included in the received reconfiguration message:
 - 2> select a suitable UTRA cell according to [4].
- 1> prohibit periodical status transmission in RLC;

- 1> remove any C-RNTI from MAC;
- 1> clear the variable C_RNTI;
- 1> start timer T305 using its initial value if timer T305 is not running and if periodical update has been configured by T305 in the IE "UE Timers and constants in connected mode" set to any other value than "infinity" in the variable TIMERS_AND_CONSTANTS;
- 1> select Secondary CCPCH according to subclause 8.5.19;
- 1> if the IE "UTRAN DRX cycle length coefficient" is included in the same message:
 - 2> use the value in the IE "UTRAN DRX Cycle length coefficient" for calculating Paging occasion and PICH Monitoring Occasion as specified in subclause 8.6.3.2.
- 1> if the IE "UTRAN DRX cycle length coefficient" is not included in the same message:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the UE enters CELL_PCH state from CELL_DCH state, and the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selected another cell than indicated by this IE or the received reconfiguration message did not include the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD):
 - 2> initiate a cell update procedure according to subclause 8.3.1 using the cause "cell reselection";
 - 2> when the cell update procedure completed successfully:
 - 3> the procedure ends.
- 1> if the UE enters CELL_PCH state from CELL_FACH state, and the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selected another cell than indicated by this IE:
 - 2> initiate a cell update procedure according to subclause 8.3.1 using the cause "cell reselection";
 - 2> when the cell update procedure is successfully completed:
 - 3> the procedure ends.
- 1> if the UE enters URA_PCH state, and after cell selection the criteria for URA update caused by "URA reselection" according to subclause 8.3.1 is fulfilled:
 - 2> initiate a URA update procedure according to subclause 8.3.1 using the cause "URA reselection";
 - 2> when the URA update procedure is successfully completed:
 - 3> the procedure ends.

8.6.3 UE information elements

8.6.3.1 Activation time

If the UE receives a message in which presence is needed for the IE "Activation time", and the value is other than the default value "Now", the UE shall:

- 1> if the frame boundary immediately before the frame with the CFN (Connection Frame Number) value indicated by the IE "Activation Time" is at the TTI boundary common to all the transport channels that are multiplexed onto the same CCTrCh including any transport channel which is added, reconfigured or has been removed:
 - 2> select that frame boundary as the activation time T.
- 1> else:
 - 2> select the next TTI boundary, which is common to all the transport channels that are multiplexed onto the same CCTrCh including any transport channel which is added, reconfigured or has been removed, after the

frame with the CFN (Connection Frame Number) value indicated by the IE "Activation Time", as the activation time T.

- 1> at the activation time T:
 - 2> for a physical channel reconfiguration caused by the received message:
 - 3> release the physical channel configuration, which was present before T;
 - 3> initiate the establishment of the physical channel configuration as specified for the physical channel information elements in the received message as specified elsewhere.
 - 2> for actions, other than a physical channel reconfiguration, caused by the received message:
 - 3> perform the actions for the information elements in the received message as specified elsewhere.

If the UE receives a message in which presence is needed for the IE "Activation time", and the value is the default value "Now", the UE shall:

- 1> choose an activation time T as soon as possible after the reception of the message, respecting the performance requirements in subclause 13.5;
- 1> at the activation time T:
- 2> perform the actions for the information elements in the received message as specified elsewhere.
- NOTE: In FDD, if the UE was in <u>idle mode or CELL_FACH</u> state upon reception of the message, regardless of the state the UE enters after reception of the message, and the value of the IE "Activation time" in the received message is different from "Now", the UE behaviour is unspecified. In TDD, if the UE was in <u>idle mode or CELL_FACH</u> state upon reception of the message, the value of the IE "Activation time" in the received message is relative to the CFN associated with the cell from which the message was received.

8.6.7.19.2a UE positioning OTDOA assistance data for UE-based

The UE shall:

- 1> if IE "UE positioning OTDOA reference cell info for UE-based" is received in System Information Block type 15.5 or in the MEASUREMENT CONTROL message or in the ASSISTANCE DATA DELIVERY:
 - 2> update the variable UE_POSITIONING_OTDOA_DATA_UE_BASED accordingly;
 - 2> store received cell information in the UE positioning reference cell info for UE-based in the variable UE_POSITIONING_OTDOA_DATA_UE_BASED, overwriting any existing information.
- 1> if IE "UE positioning OTDOA neighbour cell list for UE-based" is received in System Information Block type 15.5 or in the MEASUREMENT CONTROL message or in the ASSISTANCE DATA DELIVERY:
 - 2> update the variable UE_POSITIONING_OTDOA_DATA_UE_BASED accordingly;
 - 2> store received cell information in the neighbour cell info list for UE-based in the variable UE_POSITIONING_OTDOA_DATA_UE_BASED, overwriting any existing information.
- 1> if, according to its capabilities, UE does not support IPDLs and if IE "IPDL parameters" is received for the reference or any of the neighbour cells:
 - 2> ignore this IE.
- 1> if IE "SFN offset validity" is set to FALSE:
 - 2> ignore the IE "SFN offset".
- 1> if IE "UE positioning measurement" is received in the MEASUREMENT CONTROL message:
 - 2> also perform the following consistency checks:
 - 3> if IE "Positioning Methods" is set to "OTDOA":

- 4> if IE "UE positioning OTDOA reference cell info for UE-based" is not included and if UE positioning OTDOA reference cell info for UE-based in variable UE_POSITIONING_OTDOA_DATA_UE_BASED is empty:
 - 5> set the variable CONFIGURATION_INCOMPLETE to TRUE.
- 3> if IE "Positioning Methods" is set to "OTDOA":
 - 4> if IE "UE positioning OTDOA neighbour cell list for UE-based" is not included and if less than two neighbour cells are stored in UE positioning OTDOA neighbour cell info list for UE-based in variable UE_POSITIONING_OTDOA_DATA_UE_BASED:
 - 5> set the variable CONFIGURATION INCOMPLETE to TRUE.
 - 4> if IE "Method Type" is set to "UE based":
 - 5> if IE "UE positioning OTDOA reference cell info for UE-based" is included and if IE "Cell Position" for the reference cell is not included:
 - <u>6</u>4> set the variable CONFIGURATION_INCOMPLETE to TRUE.
 - 5> if the IE "UE positioning OTDOA neighbour cell list for UE-based" is included and if cell position of less than two neighbour cells of the cells included in this IE and stored in variable UE_POSITIONING_OTDOA_DATA_UE_BASED are different and if those cell positions are not different to the one of the reference cell stored in variable UE_POSITIONING_OTDOA_DATA_UE_BASED:
 - <u>64></u> set the variable CONFIGURATION_INCOMPLETE to TRUE.
 - 5> if the IE "UE positioning OTDOA neighbouring cell list for UE-based" is included and only two neighbour cells are included or stored in variable UE_POSITIONING_OTDOA_DATA_UE_BASED and if the IE "Round Trip Time" is neither included for the neighbour cells nor for the reference cell info:
 - <u>64></u> set the variable CONFIGURATION_INCOMPLETE to TRUE.

10.3.7.13 Inter-frequency cell info list

Contains the information for the list of measurement objects for an inter-frequency measurement.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
CHOICE Inter-frequency cell removal	OP			
>Remove all inter-frequency cells				No data
>Remove some inter-frequency cells				
>>Removed inter-frequency cells	MP	1 <maxcellm eas></maxcellm 		
>>>Inter-frequency cell id	MP		Integer(0 <maxcellme as>-1)</maxcellme 	
>No inter-frequency cells removed				No data
New inter-frequency cells	OP	1 to <maxcellm eas></maxcellm 		
>Inter-frequency cell id	MD		Integer(0 <maxcellme as>-1)</maxcellme 	
>Frequency info	MD		Frequency info 10.3.6.36	Default value is the value of the previous "frequency info" in the list. NOTE: The first occurrence is then MP.
>Cell info	MP		Cell info 10.3.7.2	
Cells for measurement	CV- BCHopt	1 to <maxcellm eas></maxcellm 		
>Inter-frequency cell id	MP		Integer(0 <maxcellme as>-1)</maxcellme 	

Condition	Explanation
BCHopt	This IE is not needed when sent in SYSTEM
	INFORMATION. Otherwise, the IE is Optional

14.1.2.3 Reporting event 1C: A non-active primary CPICH becomes better than an active primary CPICH

When an intra-frequency measurement configuring event 1c is set up, the UE shall:

- 1> create a variable TRIGGERED_1C_EVENT related to that measurement, which shall initially be empty;
- 1> delete this variable when the measurement is released.

When event 1C is configured in the UE, the UE shall:

- 1> if "Measurement quantity" is "pathloss" and Equation 1 below is fulfilled for one or more primary CPICHs, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 2 below is fulfilled for one or more primary CPICHs, for each of these primary CPICHs:
 - 2> if all required reporting quantities are available for that cell; and
 - 2> if the equations have been fulfilled for a time period indicated by "Time to trigger", and if the primary CPICH that is better is not included in the active set but the other primary CPICH is any of the primary CPICHs included in the active set, and if that first primary CPICH is not included in the "cells triggered" in the variable TRIGGERED_1C_EVENT:
 - 3> include that primary CPICH in the "cells recently triggered" in the variable TRIGGERED_1C_EVENT.

- 1> if the value of "Replacement activation threshold" for this event is less than or equal to the current number of cells in the active set or equal to 0 and if any primary CPICHs are stored in the "cells recently triggered" in the variable TRIGGERED_1C_EVENT:
 - 2> if "Reporting interval" for this event is not equal to 0:
 - 3> if the IE "Periodical reporting running" in the variable TRIGGERED_1C_EVENT is set to FALSE:
 - 4> start a timer for with the value of "Reporting interval" for this event and set the IE "Periodical reporting running" in the variable TRIGGERED_1C_EVENT to TRUE.
 - 3> set "sent reports" for that primary CPICH in the variable TRIGGERED_1C_EVENT to 1.
 - 2> send a measurement report with IEs set as below:
 - 3> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1c"; and
 - 3> include in "cell measurement event results" all entries of the "cells recently triggered" in the variable TRIGGERED_1C_EVENT not in the active set as well as the "primary CPICH info" of all the primary CPICHs in the active set for which the measured value is worse (i.e. greater for pathloss and less for the other measurement quantities) than the one of the entry in "cell recently triggered" that has the best measured value taking into account their cell individual offset. The "primary CPICH info" for those cells shall be ordered according to their measured value taking into account their cell individual offset, beginning with the best cell to the worst one;
 - 3> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.
 - 2> move all entries from "cells recently triggered" to "cells triggered" in the variable TRIGGERED_1C_EVENT.
- 1> if the timer for the periodical reporting has expired:
 - 2> if any primary CPICH is included in the "cells triggered" in the variable TRIGGERED_1C_EVENT, and not included in the current active set:
 - 3> if "Reporting interval" for this event is not equal to 0, and if "Amount of reporting" is greater than "sent reports" stored for that primary CPICH, in "cells triggered" in the variable TRIGGERED_1C_EVENT:
 - 4> increment the stored counter "sent reports" for all CPICH in "cell triggered" in variable TRIGGERED_1C_EVENT;
 - 4> start a timer with the value of "Reporting interval" for this event;
 - 4> send a measurement report with IEs set as below:
 - 5> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1c"; and
 - 5> include in "cell measurement event results" all entries of the variable TRIGGERED_1C_EVENT with value of IE "sent report" smaller than value of "Amount of reporting" and that are not part of the active set as well as the "primary CPICH info" of all the primary CPICHs in the active set for which the measured value is worse (i.e. greater for pathloss and less for the other measurement quantities) than the one of the entry in "cell recently triggered" that has the best measured value, ordering the "primary CPICH info" according to their measured value beginning with the best cell to the worst one, taking into account the cell individual offset for each cell;
 - 5> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.
 - 4> if "sent reports" in variable TRIGGERED_1C_EVENT is greater than "Amount of reporting" for all entries:
 - 5> set the IE "Periodical Reporting running" in the variable TRIGGERED_1C_EVENT to FALSE and disable the timer for the periodical reporting.

- 1> if "Measurement quantity" is "pathloss" and Equation 3 below is fulfilled for a primary CPICH, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 4 below is fulfilled for a primary CPICH or;
- 1> if a primary CPICH is added to the active set:
 - 2> if that primary CPICH is included in the "cells triggered" or "cells recently triggered" in the variable TRIGGERED_1C_EVENT:
 - 3> remove the entry of that primary CPICH from "cells triggered" or "cells recently triggered" in the variable TRIGGERED 1C EVENT.
 - 3> if no entry in the variable TRIGGERED_1C_EVENT has a value of "sent reports" smaller than "Amount of reporting":
 - 4> stop the reporting interval timer;
 - 4> set the IE "Periodical reporting running" in the variable TRIGGERED_1C_EVENT to FALSE.

Equation 1 (Triggering condition for pathloss)

$$10 Log M_{New} + CIQ_{New} \leq 10 Log M_{MAS} + CIQ_{NAS} - H_{lc}/2$$

Equation 2 (Triggering condition for all the other measurement quantities)

$$10 Log M_{ew} + CIQ_{ew} \ge 10 Log M_{eAS} + CIQ_{eAS} + H_{lc}/2$$

Equation 3 (Leaving triggering condition for pathloss)

$$10 Log M_{ew} + CIQ_{ew} > 10 Log M_{hAS} + CIQ_{hAS} + H_{lc}/2$$

Equation 4 (Leaving triggering condition for all the other measurement quantities)

$$10 Log M_{Pew} + CIQ_{Pew} < 10 Log M_{PaS} + CIQ_{PaS} - H_{1c}/2$$

The variables in the formula are defined as follows:

 M_{New} is the measurement result of the cell not included in the active set.

 CIO_{New} is the individual cell offset for the cell becoming better than the cell in the active set if an individual cell offset is stored for that cell. Otherwise it is equal to 0.

For pathloss:

 M_{lnAS} is the measurement result of the cell in the active set with the highest measurement result.

For other measurement quantities:

 M_{InAS} is the measurement result of the cell in the active set with the lowest measurement result.

 CIO_{InAS} is the individual cell offset for the cell in the active set that is becoming worse than the new cell.

 H_{1c} is the hysteresis parameter for the event 1c.

If the measurement results are pathloss or CPICH-Ec/No then M_{New} and M_{inAS} are expressed as ratios.

If the measurement result is CPICH-RSCP then M_{New} and M_{inAS} are expressed in mW.

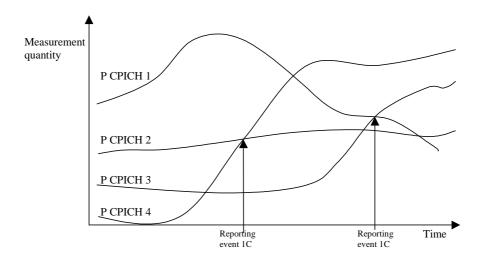


Figure 14.1.2.3-1 [Informative]: A primary CPICH that is not included in the active set becomes better than a primary CPICH that is in the active set

In this figure, the parameters hysteresis and time to trigger, as well as the cell individual offsets for all cells are equal to 0. In this example the cells belonging to primary CPICH 1 and 2 are in the active set, but the cells transmitting primary CPICH 3 and CPICH 4 are not (yet) in the active set.

The first measurement report is sent when primary CPICH 4 becomes better than primary CPICH 2. The "cell measurement event result" of the measurement report contains the information of primary CPICH 4 and CPICH 2.

Assuming that the active set has been updated after the first measurement report (active set is now primary CPICH 1 and primary CPICH 4), the second report is sent when primary CPICH 3 becomes better than primary CPICH 1. The "cell measurement event result" of the second measurement report contains the information of primary CPICH 3 and primary CPICH 1.

14.3.1.1 Event 3a: The estimated quality of the currently used UTRAN frequency is below a certain threshold **and** the estimated quality of the other system is above a certain threshold.

When an inter-RAT measurement configuring event 3a is set up, the UE shall:

- 1> create a variable TRIGGERED_3A_EVENT related to that measurement, which shall initially be empty;
- 1> delete this variable when the measurement is released.

When event 3a is configured in the UE within a measurement, the UE shall:

- 1> if the other RAT is GSM, and if IE "BSIC verification required" is set to "required":
 - 2> if equations 1 and 2 below have both been fulfilled for a time period indicated by "Time to trigger" from the same instant, respectively for the used UTRAN frequency and for one or several GSM cells that match any of the BCCH ARFCN and BSIC combinations considered in that inter-RAT measurement:
 - 3> if the Inter-RAT cell id of any of those GSM cells is not stored in the variable TRIGGERED_3A_EVENT:
 - 4> store the Inter-RAT cell ids of the GSM cells that triggered the event and that were not previously stored in the variable TRIGGERED_3A_EVENT into that variable.
 - 4> send a measurement report with IEs set as below:
 - 5> in "inter-RAT measurement event result": "inter-RAT event identity" to "3a", "CHOICE BSIC" to "verified BSIC" and "Inter-RAT cell id" to the GSM cells that triggered the event (best one first), taking into account the cell individual offset of the GSM cells;
 - 5> "measured results" and possible "additional measured results" according to 8.4.2, not taking into account the cell individual offset.

- 2> if equation 4 is fulfilled for a GSM cell whose inter-RAT cell id is stored in the variable TRIGGERED_3A_EVENT:
 - 3> remove the inter-RAT cell id of that GSM cell from the variable TRIGGERED_3A_EVENT.
- 2> if equation 3 is fulfilled for the used frequency in UTRAN:
 - 3> clear the variable TRIGGERED 3A EVENT.
- 1> if the other RAT is GSM, and if IE "BSIC verification required" is set to "not required":
 - 2> if equations 1 and 2 below have been fulfilled for a time period indicated by "Time to trigger" from the same instant, respectively for the used UTRAN frequency and for one or several BCCH ARFCNs considered in that inter-RAT measurement:
 - 3> if any of those BCCH ARFCNs is not stored into the variable TRIGGERED_3A_EVENT:
 - 4> store the BCCH ARFCNs that triggered the event and that were not previously stored in the variable TRIGGERED_3A_EVENT into that variable;
 - 4> send a measurement report with IEs set as below:
 - 5> in "inter-RAT measurement event result": "inter-RAT event identity" to "3a", "CHOICE BSIC" to "non verified BSIC" and "BCCH ARFCN" to BCCH ARFCNs that triggered the event (best one first), taking into account the cell individual offset of the GSM cells;
 - 5> "measured results" and possible "additional measured results" according to 8.4.2, not taking into account the cell individual offset.
 - 2> if equation 4 is fulfilled for a BCCH ARFCN that is stored in the variable TRIGGERED_3A_EVENT:
 - 3> remove that BCCH ARFCN from the variable TRIGGERED_3A_EVENT.
 - 2> if equation 3 is fulfilled for the used frequency in UTRAN:
 - 3> clear the variable TRIGGERED_3A_EVENT.

Triggering conditions:

Equation 1:

$$Q_{Used} \leq T_{Used} - H_{3a}/2$$

The variables in the formula are defined as follows:

 Q_{Used} is the quality estimate of the used UTRAN frequency.

 T_{Used} is the absolute threshold that applies for the used frequency in that measurement.

 H_{3a} is the hysteresis parameter for event 3a.

Equation 2:

$$M_{OtherRAT} + CIQ_{theRAT} \ge T_{OtherRAT} + H_{3a}/2$$

The variables in the formula are defined as follows:

 $M_{Other\,RAT}$ is the measurement quantity for the cell of the other system.

<u>CIO</u>_{Other RAT} is the cell individual offset for the cell of the other system.

 $T_{Other\,RAT}$ is the absolute threshold that applies for the other system in that measurement.

 H_{3a} is the hysteresis parameter for event 3a.

Leaving triggered state conditions:

Equation 3:

$$Q_{Used} > T_{Used} + H_{3a}/2$$

The variables in the formula are defined as follows:

 $oldsymbol{Q}_{\textit{Used}}$ is the quality estimate of the used UTRAN frequency.

 T_{Used} is the absolute threshold that applies for the used frequency in that measurement.

 H_{3a} is the hysteresis parameter for event 3a.

Equation 4:

$$M_{OtherRAT} + CIQ_{theRAT} < T_{OtherRAT} - H_{3a}/2$$

The variables in the formula are defined as follows:

 $M_{Other\ RAT}$ is the measurement quantity for the cell of the other system. $M_{Other\ RAT}$ is expressed in dBm.

CIO_{Other RAT} is the cell individual offset for the cell of the other system.

 $T_{Other\ RAT}$ is the absolute threshold that applies for the other system in that measurement.

 H_{3a} is the hysteresis parameter for event 3a.

3GPP TSG-RAN WG2 Meeting #33 Sophia Antipolis, France, 12th-15th November 2002

CHANGE REQUEST					CR-Form-v7				
ж	25.331	CR	1768	жrev	-	æ	Current version:	4.7.0	*
- 11	IFI Day and a district					•			

*	25.331 CR 1768 # rev - # Current version: 4.7.0 #				
For <u>HELP</u>	on using this form, see bottom of this page or look at the pop-up text over the % symbols.				
Proposed change affects: UICC apps# ME X Radio Access Network X Core Network					
Title:	★ Corrections to Activation time				
Source:	₩ Ericsson				
Work item cod	Date: 第 TEI Date: 第 13/11/2002				
Reason for cha	Use one of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900. Release 1990. Release 1990. Release 1990. Release 1990. Detailed explanations of the above categories can be found in 3GPP TR 21.900. Release 1990. Release 1990.				
	5. 14.1.2.3 It is not clear if the cell individual offset should be taken into account when including cells in the event list of event 1c.				
	6. 14.3.1.1 CIO _{OtherRAT} in formula 2 is not explained.				

- Summary of change: # 1. Sentence in section 8.6.3.1 modified to also forbid use of an activation time other than "now" for the state transition idle to any RRC connected mode state for FDD and allow it for TDD.
 - 2. Nothing done.

- 3. 8.6.7.19.2a Last three occasions of "set the variable CONFIGURATION_INCOMPLETE to TRUE" is indented and changed to level 6.
- 4. 10.3.7.13 Last IE group name is renamed to "Cells for measurement"
- 5. Sentence added to explicitly state that cell individual offsets should be taken into account.
- 6. 14.3.1.1 $\text{CIO}_{\text{OtherRAT}}$ is added below equation 2 in the same way as below equation 4.

Impact analysis:

1. For FDD the UE implementation is not affected since UE behaviour is unspecified.

For TDD the UE should also for the idle mode to connected mode transition maintain CFN relative to Activation Time specified in RRC procedures. This could be considered an already a known requirement.

UTRAN implementation is not directly affected given activation time other than "now" is utilised.

- 4 No foreseen impact if not implemented in the UE or UTRAN
- 3. Potentially if misinterpreted the UE might reject valid configurations if indentation level is misunderstood.
- 5. Specifications is currently ambigous. If implemented in the UE and not in UTRAN or the opposite the UE will trigger the event at different levels compared to what is assumed by UTRAN.
- 6. Could potentially lead to misinterpreations related to what CIO in the formulas mean, meaning that CIO will not be applied in the formula.

Consequences if not approved:

It could be interpreted that since the idle to CELL_FACH or CELL_DCH state transition is not mentioned in the NOTE, that other values than "now" are allowed to use in the RRC CONNECTION SETUP message for FDD. This would however, lead to unpredicted UE behaviour.

Misunderstandings of intention of the text

Clauses affected:	8 8.6.3.1, 8.6.7.19.2a, 10.3.7.13, 14.1.2.3, 14.3.1.1
Other specs affected:	X Other core specifications X Test specifications O&M Specifications
Other comments:	₩

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.6.3 UE information elements

8.6.3.1 Activation time

If the UE receives a message in which presence is needed for the IE "Activation time", and the value is other than the default value "Now", the UE shall:

- 1> if the frame boundary immediately before the frame with the CFN (Connection Frame Number) value indicated by the IE "Activation Time" is at the TTI boundary common to all the transport channels that are multiplexed onto the same CCTrCh including any transport channel which is added, reconfigured or has been removed:
 - 2> select that frame boundary as the activation time T.

1> else:

2> select the next TTI boundary, which is common to all the transport channels that are multiplexed onto the same CCTrCh including any transport channel which is added, reconfigured or has been removed, after the frame with the CFN (Connection Frame Number) value indicated by the IE "Activation Time", as the activation time T.

1> at the activation time T:

- 2> for a physical channel reconfiguration caused by the received message:
 - 3> release the physical channel configuration, which was present before T;
 - 3> initiate the establishment of the physical channel configuration as specified for the physical channel information elements in the received message as specified elsewhere.
- 2> for actions, other than a physical channel reconfiguration, caused by the received message:
 - 3> perform the actions for the information elements in the received message as specified elsewhere.

If the UE receives a message in which presence is needed for the IE "Activation time", and the value is the default value "Now", the UE shall:

- 1> choose an activation time T as soon as possible after the reception of the message, respecting the performance requirements in subclause 13.5;
- 1> at the activation time T:
- 2> perform the actions for the information elements in the received message as specified elsewhere.

NOTE: In FDD, if the UE was in <u>idle mode or CELL_FACH</u> state upon reception of the message, regardless of the state the UE enters after reception of the message, and the value of the IE "Activation time" in the received message is different from "Now", the UE behaviour is unspecified. In TDD, if the UE was in <u>idle mode or CELL_FACH</u> state upon reception of the message, the value of the IE "Activation time" in the received message is relative to the CFN associated with the cell from which the message was received.

8.6.7.19.2a UE positioning OTDOA assistance data for UE-based

The UE shall:

- 1> if IE "UE positioning OTDOA reference cell info for UE-based" is received in System Information Block type 15.5 or in the MEASUREMENT CONTROL message or in the ASSISTANCE DATA DELIVERY:
 - 2> update the variable UE_POSITIONING_OTDOA_DATA_UE_BASED accordingly;
 - 2> store received cell information in the UE positioning reference cell info for UE-based in the variable UE_POSITIONING_OTDOA_DATA_UE_BASED, overwriting any existing information.
- 1> if IE "UE positioning OTDOA neighbour cell list for UE-based" is received in System Information Block type 15.5 or in the MEASUREMENT CONTROL message or in the ASSISTANCE DATA DELIVERY:

- 2> update the variable UE_POSITIONING_OTDOA_DATA_UE_BASED accordingly;
- 2> store received cell information in the neighbour cell info list for UE-based in the variable UE_POSITIONING_OTDOA_DATA_UE_BASED, overwriting any existing information.
- 1> if, according to its capabilities, UE does not support IPDLs and if IE "IPDL parameters" is received for the reference or any of the neighbour cells:
 - 2> ignore this IE.
- 1> if IE "SFN offset validity" is set to FALSE:
 - 2> ignore the IE "SFN offset".
- 1> if IE "UE positioning measurement" is received in the MEASUREMENT CONTROL message:
 - 2> also perform the following consistency checks:
 - 3> if IE "Positioning Methods" is set to "OTDOA":
 - 4> if IE "UE positioning OTDOA reference cell info for UE-based" is not included and if UE positioning OTDOA reference cell info for UE-based in variable UE_POSITIONING_OTDOA_DATA_UE_BASED is empty:
 - 5> set the variable CONFIGURATION_INCOMPLETE to TRUE.
 - 3> if IE "Positioning Methods" is set to "OTDOA":
 - 4> if IE "UE positioning OTDOA neighbour cell list for UE-based" is not included and if less than two neighbour cells are stored in UE positioning OTDOA neighbour cell info list for UE-based in variable UE_POSITIONING_OTDOA_DATA_UE_BASED:
 - 5> set the variable CONFIGURATION INCOMPLETE to TRUE.
 - 4> if IE "Method Type" is set to "UE based":
 - 5> if IE "UE positioning OTDOA reference cell info for UE-based" is included and if IE "Cell Position" for the reference cell is not included:
 - 64> set the variable CONFIGURATION_INCOMPLETE to TRUE.
 - 5> if the IE "UE positioning OTDOA neighbour cell list for UE-based" is included and if cell position of less than two neighbour cells of the cells included in this IE and stored in variable UE_POSITIONING_OTDOA_DATA_UE_BASED are different and if those cell positions are not different to the one of the reference cell stored in variable UE_POSITIONING_OTDOA_DATA_UE_BASED:
 - <u>64></u> set the variable CONFIGURATION_INCOMPLETE to TRUE.
 - 5> if the IE "UE positioning OTDOA neighbouring cell list for UE-based" is included and only two neighbour cells are included or stored in variable UE_POSITIONING_OTDOA_DATA_UE_BASED and if the IE "Round Trip Time" is neither included for the neighbour cells nor for the reference cell info:
 - <u>64></u> set the variable CONFIGURATION_INCOMPLETE to TRUE.

10.3.7.13 Inter-frequency cell info list

Contains the information for the list of measurement objects for an inter-frequency measurement.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
CHOICE Inter-frequency cell removal	OP			
>Remove all inter-frequency cells				No data
>Remove some inter-frequency cells				
>>Removed inter-frequency cells	MP	1 <maxcellm eas></maxcellm 		
>>>Inter-frequency cell id	MP		Integer(0 <maxcellme as>-1)</maxcellme 	
>No inter-frequency cells removed				No data
New inter-frequency cells	OP	1 to <maxcellm eas></maxcellm 		
>Inter-frequency cell id	MD		Integer(0 <maxcellme as="">-1)</maxcellme>	
>Frequency info	MD		Frequency info 10.3.6.36	Default value is the value of the previous "frequency info" in the list. NOTE: The first occurrence is then MP.
>Cell info	MP		Cell info 10.3.7.2	
Cells for measurement	CV- BCHopt	1 to <maxcellm eas></maxcellm 		
>Inter-frequency cell id	MP		Integer(0 <maxcellme as>-1)</maxcellme 	

Condition	Explanation
BCHopt	This IE is not needed when sent in SYSTEM
	INFORMATION. Otherwise, the IE is Optional

14.1.2.3 Reporting event 1C: A non-active primary CPICH becomes better than an active primary CPICH

When an intra-frequency measurement configuring event 1c is set up, the UE shall:

- 1> create a variable TRIGGERED_1C_EVENT related to that measurement, which shall initially be empty;
- 1> delete this variable when the measurement is released.

When event 1C is configured in the UE, the UE shall:

- 1> if "Measurement quantity" is "pathloss" and Equation 1 below is fulfilled for one or more primary CPICHs, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 2 below is fulfilled for one or more primary CPICHs, for each of these primary CPICHs:
 - 2> if all required reporting quantities are available for that cell; and
 - 2> if the equations have been fulfilled for a time period indicated by "Time to trigger", and if the primary CPICH that is better is not included in the active set but the other primary CPICH is any of the primary CPICHs included in the active set, and if that first primary CPICH is not included in the "cells triggered" in the variable TRIGGERED_1C_EVENT:
 - 3> include that primary CPICH in the "cells recently triggered" in the variable TRIGGERED_1C_EVENT.

- 1> if the value of "Replacement activation threshold" for this event is less than or equal to the current number of cells in the active set or equal to 0 and if any primary CPICHs are stored in the "cells recently triggered" in the variable TRIGGERED_1C_EVENT:
 - 2> if "Reporting interval" for this event is not equal to 0:
 - 3> if the IE "Periodical reporting running" in the variable TRIGGERED 1C EVENT is set to FALSE:
 - 4> start a timer for with the value of "Reporting interval" for this event and set the IE "Periodical reporting running" in the variable TRIGGERED_1C_EVENT to TRUE.
 - 3> set "sent reports" for that primary CPICH in the variable TRIGGERED_1C_EVENT to 1.
 - 2> send a measurement report with IEs set as below:
 - 3> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1c"; and
 - 3> include in "cell measurement event results" all entries of the "cells recently triggered" in the variable TRIGGERED_1C_EVENT not in the active set as well as the "primary CPICH info" of all the primary CPICHs in the active set for which the measured value is worse (i.e. greater for pathloss and less for the other measurement quantities) than the one of the entry in "cell recently triggered" that has the best measured value taking into account their cell individual offset. The "primary CPICH info" for those cells shall be ordered according to their measured value taking into account their cell individual offset, beginning with the best cell to the worst one;
 - 3> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.
 - 2> move all entries from "cells recently triggered" to "cells triggered" in the variable TRIGGERED_1C_EVENT.
- 1> if the timer for the periodical reporting has expired:
 - 2> if any primary CPICH is included in the "cells triggered" in the variable TRIGGERED_1C_EVENT, and not included in the current active set:
 - 3> if "Reporting interval" for this event is not equal to 0, and if "Amount of reporting" is greater than "sent reports" stored for that primary CPICH, in "cells triggered" in the variable TRIGGERED_1C_EVENT:
 - 4> increment the stored counter "sent reports" for all CPICH in "cell triggered" in variable TRIGGERED_1C_EVENT;
 - 4> start a timer with the value of "Reporting interval" for this event;
 - 4> send a measurement report with IEs set as below:
 - 5> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1c"; and
 - 5> include in "cell measurement event results" all entries of the variable TRIGGERED_1C_EVENT with value of IE "sent report" smaller than value of "Amount of reporting" and that are not part of the active set as well as the "primary CPICH info" of all the primary CPICHs in the active set for which the measured value is worse (i.e. greater for pathloss and less for the other measurement quantities) than the one of the entry in "cell recently triggered" that has the best measured value, ordering the "primary CPICH info" according to their measured value beginning with the best cell to the worst one, taking into account the cell individual offset for each cell;
 - 5> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.
 - 4> if "sent reports" in variable TRIGGERED_1C_EVENT is greater than "Amount of reporting" for all entries:
 - 5> set the IE "Periodical Reporting running" in the variable TRIGGERED_1C_EVENT to FALSE and disable the timer for the periodical reporting.

- 1> if "Measurement quantity" is "pathloss" and Equation 3 below is fulfilled for a primary CPICH, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 4 below is fulfilled for a primary CPICH or;
- 1> if a primary CPICH is added to the active set:
 - 2> if that primary CPICH is included in the "cells triggered" or "cells recently triggered" in the variable TRIGGERED_1C_EVENT:
 - 3> remove the entry of that primary CPICH from "cells triggered" or "cells recently triggered" in the variable TRIGGERED 1C EVENT.
 - 3> if no entry in the variable TRIGGERED_1C_EVENT has a value of "sent reports" smaller than "Amount of reporting":
 - 4> stop the reporting interval timer;
 - 4> set the IE "Periodical reporting running" in the variable TRIGGERED_1C_EVENT to FALSE.

Equation 1 (Triggering condition for pathloss)

$$10 Log M_{New} + CIQ_{New} \leq 10 Log M_{MAS} + CIQ_{NAS} - H_{lc}/2$$

Equation 2 (Triggering condition for all the other measurement quantities)

$$10 Log M_{ev} + CIQ_{ev} \ge 10 Log M_{pAS} + CIQ_{pAS} + H_{lc}/2$$

Equation 3 (Leaving triggering condition for pathloss)

$$10 Log M_{ew} + CIQ_{ew} > 10 Log M_{hAS} + CIQ_{hAS} + H_{lc}/2$$

Equation 4 (Leaving triggering condition for all the other measurement quantities)

$$10 Log M_{Pew} + CIQ_{Pew} < 10 Log M_{PAS} + CIQ_{PAS} - H_{1c}/2$$

The variables in the formula are defined as follows:

 M_{New} is the measurement result of the cell not included in the active set.

 CIO_{New} is the individual cell offset for the cell becoming better than the cell in the active set if an individual cell offset is stored for that cell. Otherwise it is equal to 0.

For pathloss:

 M_{lnAS} is the measurement result of the cell in the active set with the highest measurement result.

For other measurement quantities:

 M_{InAS} is the measurement result of the cell in the active set with the lowest measurement result.

 CIO_{InAS} is the individual cell offset for the cell in the active set that is becoming worse than the new cell.

 H_{1c} is the hysteresis parameter for the event 1c.

If the measurement results are pathloss or CPICH-Ec/No then M_{New} and M_{inAS} are expressed as ratios.

If the measurement result is CPICH-RSCP then M_{New} and M_{inAS} are expressed in mW.

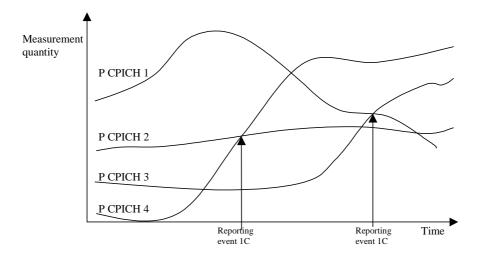


Figure 14.1.2.3-1 [Informative]: A primary CPICH that is not included in the active set becomes better than a primary CPICH that is in the active set

In this figure, the parameters hysteresis and time to trigger, as well as the cell individual offsets for all cells are equal to 0. In this example the cells belonging to primary CPICH 1 and 2 are in the active set, but the cells transmitting primary CPICH 3 and CPICH 4 are not (yet) in the active set.

The first measurement report is sent when primary CPICH 4 becomes better than primary CPICH 2. The "cell measurement event result" of the measurement report contains the information of primary CPICH 4 and CPICH 2.

Assuming that the active set has been updated after the first measurement report (active set is now primary CPICH 1 and primary CPICH 4), the second report is sent when primary CPICH 3 becomes better than primary CPICH 1. The "cell measurement event result" of the second measurement report contains the information of primary CPICH 3 and primary CPICH 1.

14.3.1.1 Event 3a: The estimated quality of the currently used UTRAN frequency is below a certain threshold **and** the estimated quality of the other system is above a certain threshold.

When an inter-RAT measurement configuring event 3a is set up, the UE shall:

- 1> create a variable TRIGGERED_3A_EVENT related to that measurement, which shall initially be empty;
- 1> delete this variable when the measurement is released.

When event 3a is configured in the UE within a measurement, the UE shall:

- 1> if the other RAT is GSM, and if IE "BSIC verification required" is set to "required":
 - 2> if equations 1 and 2 below have both been fulfilled for a time period indicated by "Time to trigger" from the same instant, respectively for the used UTRAN frequency and for one or several GSM cells that match any of the BCCH ARFCN and BSIC combinations considered in that inter-RAT measurement:
 - 3> if the Inter-RAT cell id of any of those GSM cells is not stored in the variable TRIGGERED_3A_EVENT:
 - 4> store the Inter-RAT cell ids of the GSM cells that triggered the event and that were not previously stored in the variable TRIGGERED_3A_EVENT into that variable.
 - 4> send a measurement report with IEs set as below:
 - 5> in "inter-RAT measurement event result": "inter-RAT event identity" to "3a", "CHOICE BSIC" to "verified BSIC" and "Inter-RAT cell id" to the GSM cells that triggered the event (best one first), taking into account the cell individual offset of the GSM cells;

- 5> "measured results" and possible "additional measured results" according to 8.4.2, not taking into account the cell individual offset.
- 2> if equation 4 is fulfilled for a GSM cell whose inter-RAT cell id is stored in the variable TRIGGERED_3A_EVENT:
 - 3> remove the inter-RAT cell id of that GSM cell from the variable TRIGGERED_3A_EVENT.
- 2> if equation 3 is fulfilled for the used frequency in UTRAN:
 - 3> clear the variable TRIGGERED_3A_EVENT.
- 1> if the other RAT is GSM, and if IE "BSIC verification required" is set to "not required":
 - 2> if equations 1 and 2 below have been fulfilled for a time period indicated by "Time to trigger" from the same instant, respectively for the used UTRAN frequency and for one or several BCCH ARFCNs considered in that inter-RAT measurement:
 - 3> if any of those BCCH ARFCNs is not stored into the variable TRIGGERED_3A_EVENT:
 - 4> store the BCCH ARFCNs that triggered the event and that were not previously stored in the variable TRIGGERED_3A_EVENT into that variable;
 - 4> send a measurement report with IEs set as below:
 - 5> in "inter-RAT measurement event result": "inter-RAT event identity" to "3a", "CHOICE BSIC" to "non verified BSIC" and "BCCH ARFCN" to BCCH ARFCNs that triggered the event (best one first), taking into account the cell individual offset of the GSM cells;
 - 5> "measured results" and possible "additional measured results" according to 8.4.2, not taking into account the cell individual offset.
 - 2> if equation 4 is fulfilled for a BCCH ARFCN that is stored in the variable TRIGGERED_3A_EVENT:
 - 3> remove that BCCH ARFCN from the variable TRIGGERED_3A_EVENT.
 - 2> if equation 3 is fulfilled for the used frequency in UTRAN:
 - 3> clear the variable TRIGGERED_3A_EVENT.

Triggering conditions:

Equation 1:

$$Q_{Ised} \leq T_{IIsed} - H_{3a}/2$$

The variables in the formula are defined as follows:

 Q_{Used} is the quality estimate of the used UTRAN frequency.

T_{Used} is the absolute threshold that applies for the used frequency in that measurement.

 H_{3a} is the hysteresis parameter for event 3a.

Equation 2:

$$M_{OtherRAT} + CIQ_{theRAT} \ge T_{OtherRAT} + H_{3a}/2$$

The variables in the formula are defined as follows:

 $M_{Other\,RAT}$ is the measurement quantity for the cell of the other system.

<u>CIO other RAT</u> is the cell individual offset for the cell of the other system.

 $T_{Other\,RAT}$ is the absolute threshold that applies for the other system in that measurement.

 H_{3a} is the hysteresis parameter for event 3a.

Leaving triggered state conditions:

Equation 3:

$$Q_{Used} > T_{Used} + H_{3a}/2$$

The variables in the formula are defined as follows:

 Q_{Used} is the quality estimate of the used UTRAN frequency.

 T_{Used} is the absolute threshold that applies for the used frequency in that measurement.

 H_{3a} is the hysteresis parameter for event 3a.

Equation 4:

$$M_{OtherRAT} + CIQ_{theRAT} < T_{OtherRAT} - H_{3a}/2$$

The variables in the formula are defined as follows:

 $M_{Other\ RAT}$ is the measurement quantity for the cell of the other system. $M_{Other\ RAT}$ is expressed in dBm.

CIO_{Other RAT} is the cell individual offset for the cell of the other system.

 $T_{Other\ RAT}$ is the absolute threshold that applies for the other system in that measurement.

 H_{3a} is the hysteresis parameter for event 3a.

3GPP TSG-RAN WG2 Meeting #33 Sophia Antipolis, France, 12th-15th November 2002

	(CHANG	E REQ	UE	ST	•		CR-Form-v7
*	25.331 CR	1769	≋ rev	-	¥	Current version:	5.2.0	 #

For HELP on	using this form, see bottom of this page or look at the p	pop-up text over the 🛱 symbols.
Proposed change	e affects: UICC apps業 ME <mark>X</mark> Radio Acc	cess Network X Core Network
Title:	Corrections to Activation time	
Source:	f Ericsson	
Work item code:	€ TEI	<i>Date:</i> # 13/11/2002
Category:	-	Release: # Rel-5
	Use one of the following categories:	Use <u>one</u> of the following releases:
	F (correction)A (corresponds to a correction in an earlier release)	2 (GSM Phase 2) R96 (Release 1996)
	B (addition of feature),	R97 (Release 1990)
	C (functional modification of feature)	R98 (Release 1998)
	D (editorial modification)	R99 (Release 1999)
	Detailed explanations of the above categories can	Rel-4 (Release 4)
	be found in 3GPP TR 21.900.	Rel-5 (Release 5)
		Rel-6 (Release 6)
Reason for chang	ge: # 1. At RAN2#31 CR 1529r2 in R2-022226 was section 8.6.3.1 on activation time. This note do	

activation time can be received in the RRC CONNECTION SETUP message causing the UE to transit from idle to CELL_FACH or CELL_DCH state.

It is assumed that for a UE in idle mode any activation time value except "now" should also result in UE behaviour unspecified for FDD and be allowed for TDD

- 2. The same editoiral error that exists in Rel'99 (8.2.2.3 Line break is missing) does not exist in Rel-5. It is also so that all the text related to in TDD that do exist in Rel'99 and Rel'4 does not exist in Rel-5.
- 3. 8.6.7.19.2a Last three occasions of "set the variable..." have the wrong indentation.
- 4. 10.3.7.13 IE group called "Cell for measurement" although it contains several cells. The similar group in 10.3.7.33 is correctly called "Cells for measurement".
- 5. 14.1.2.3 It is not clear if the cell individual offset should be taken into account when including cells in the event list of event 1c.
- 6. 14.3.1.1 CIO_{OtherRAT} in formula 2 is not explained.

Summary of change: ₩

1. Sentence in section 8.6.3.1 modified to also forbid use of an activation time other than "now" for the state transition idle to any RRC connected mode state for FDD and allow it for TDD.

- 2. Nothing done.
- 3. 8.6.7.19.2a Last three occasions of "set the variable CONFIGURATION_INCOMPLETE to TRUE" is indented and changed to level 6.
- 4. 10.3.7.13 Last IE group name is renamed to "Cells for measurement"
- 5. Sentence added to explicitely state that cell individual offsets should be taken into account.
- 6. 14.3.1.1 $\text{CIO}_{\text{OtherRAT}}$ is added below equation 2 in the same way as below equation 4.

Impact analysis:

1. For FDD the UE implementation is not affected since UE behaviour is unspecified.

For TDD the UE should also for the idle mode to connected mode transition maintain CFN relative to Activation Time specified in RRC procedures. This could be considered an already a known requirement.

UTRAN implementation is not directly affected given activation time other than "now" is utilised.

- 4 No foreseen impact if not implemented in the UE or UTRAN
- 3. Potentially if misinterpreted the UE might reject valid configurations if indentation level is misunderstood.
- 5. Specifications is currently ambigous. If implemented in the UE and not in UTRAN or the opposite the UE will trigger the event at different levels compared to what is assumed by UTRAN.
- 6. Could potentially lead to misinterpreations related to what CIO in the formulas mean, meaning that CIO will not be applied in the formula.

Consequences if not approved:

It could be interpreted that since the idle to CELL_FACH or CELL_DCH state transition is not mentioned in the NOTE, that other values than "now" are allowed to use in the RRC CONNECTION SETUP message for FDD. This would however, lead to unpredicted UE behaviour.

Misunderstandings of intention of the text

Clauses affected:	8 8.6.3.1, 8.6.7.19.2a, 10.3.7.13, 14.1.2.3, 14.3.1.1
Other specs affected:	Y N X Other core specifications # X Test specifications X O&M Specifications X O&M Specifications X O&M Specifications
Other comments:	**************************************

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked \$\mathbb{X}\$ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

3)	With "track changes" disabled, paste the entire CR form (the clause containing the first piece of changed text. Del the change request.	(use CTRL-A to select it) into the specification just in front of ete those parts of the specification which are not relevant to

8.6.3 UE information elements

8.6.3.1 Activation time

If the UE receives a message in which presence is needed for the IE "Activation time", and the value is other than the default value "Now", the UE shall:

- 1> if the frame boundary immediately before the frame with the CFN (Connection Frame Number) value indicated by the IE "Activation Time" is at the TTI boundary common to all the transport channels that are multiplexed onto the same CCTrCh including any transport channel which is added, reconfigured or has been removed:
 - 2> select that frame boundary as the activation time T.

1> else:

2> select the next TTI boundary, which is common to all the transport channels that are multiplexed onto the same CCTrCh including any transport channel which is added, reconfigured or has been removed, after the frame with the CFN (Connection Frame Number) value indicated by the IE "Activation Time", as the activation time T.

1> at the activation time T:

- 2> for a physical channel reconfiguration other than an HS-DSCH related reconfiguration, caused by the received message:
 - 3> release the physical channel configuration, which was present before T;
 - 3> initiate the establishment of the physical channel configuration as specified for the physical channel information elements in the received message as specified elsewhere.
- 2> for an HS-DSCH related reconfiguration caused by the received message:
 - 3> select the HS-SCCH subframe boundary immediately before the first HS-SCCH subframe, which entirely falls within the 10 ms frame next after T;
 - 3> start using, at that HS-SCCH subframe boundary, the new HS-DSCH configuration in the received message, replacing any old HS-DSCH configuration.
- 2> for actions, other than a physical channel reconfiguration, caused by the received message:
 - 3> perform the actions for the information elements in the received message as specified elsewhere.

NOTE: An "HS-DSCH related reconfiguration" includes, in particular, reconfigurations that need to be timealigned with the 2ms subframe of the HS-SCCH, HS-PDSCH and/or HS-DPCCH. For example, start and stop of HS-SCCH reception and serving HS-DSCH cell change.

If the UE receives a message in which presence is needed for the IE "Activation time", and the value is the default value "Now", the UE shall:

- 1> choose an activation time T as soon as possible after the reception of the message, respecting the performance requirements in subclause 13.5;
- 1> at the activation time T:
 - 2> perform the actions for the information elements in the received message as specified elsewhere.
- NOTE: In FDD, if the UE was in <u>idle mode or CELL_FACH</u> state upon reception of the message, regardless of the state the UE enters after reception of the message, and the value of the IE "Activation time" in the received message is different from "Now", the UE behaviour is unspecified. In TDD, if the UE was in <u>idle mode or CELL_FACH</u> state upon reception of the message, the value of the IE "Activation time" in the received message is relative to the CFN associated with the cell from which the message was received.

8.6.7.19.2a UE positioning OTDOA assistance data for UE-based

The UE shall:

- 1> if IE "UE positioning OTDOA reference cell info for UE-based" is received in System Information Block type 15.5 or in the MEASUREMENT CONTROL message or in the ASSISTANCE DATA DELIVERY:
 - 2> update the variable UE_POSITIONING_OTDOA_DATA_UE_BASED accordingly;
 - 2> store received cell information in the UE positioning reference cell info for UE-based in the variable UE_POSITIONING_OTDOA_DATA_UE_BASED, overwriting any existing information.
- 1> if IE "UE positioning OTDOA neighbour cell list for UE-based" is received in System Information Block type 15.5 or in the MEASUREMENT CONTROL message or in the ASSISTANCE DATA DELIVERY:
 - 2> update the variable UE_POSITIONING_OTDOA_DATA_UE_BASED accordingly;
 - 2> store received cell information in the neighbour cell info list for UE-based in the variable UE_POSITIONING_OTDOA_DATA_UE_BASED, overwriting any existing information.
- 1> if, according to its capabilities, UE does not support IPDLs and if IE "IPDL parameters" is received for the reference or any of the neighbour cells:
 - 2> ignore this IE.
- 1> in 1.28 Mcps TDD:
 - 2> if the IE "IPDL parameters" is received and the UE supports IPDLs:
 - 3> ignore the IE IP_Slot;
 - 3> if the IE "IP PCCPCH" is set to FALSE:
 - 4> configure the physical layer with IP_Sub to be first subframe according to [33].
 - 3> if the IE "IP_PCCPCH" is set to TRUE:
 - 4> configure the physical layer with IP_Sub to be second subframe according to [33].
 - 3> if the IE "IP_PCCPCH" is absent:
 - 4> configure the physical layer with IP_Sub to use both subframes according to [33].
- 1> if IE "SFN offset validity" is set to FALSE:
 - 2> ignore the IE "SFN offset".
- 1> if IE "UE positioning measurement" is received in the MEASUREMENT CONTROL message:
 - 2> also perform the following consistency checks:
 - 3> if IE "Positioning Methods" is set to "OTDOA":
 - 4> if IE "UE positioning OTDOA reference cell info for UE-based" is not included and if UE positioning OTDOA reference cell info for UE-based in variable UE_POSITIONING_OTDOA_DATA_UE_BASED is empty:
 - 5> set the variable CONFIGURATION_INCOMPLETE to TRUE.
 - 3> if IE "Positioning Methods" is set to "OTDOA":
 - 4> if IE "UE positioning OTDOA neighbour cell list for UE-based" is not included and if less than two neighbour cells are stored in UE positioning OTDOA neighbour cell info list for UE-based in variable UE_POSITIONING_OTDOA_DATA_UE_BASED:
 - 5> set the variable CONFIGURATION_INCOMPLETE to TRUE.
 - 4> if IE "Method Type" is set to "UE based":

- 5> if IE "UE positioning OTDOA reference cell info for UE-based" is included and if IE "Cell Position" for the reference cell is not included:
 - set the variable CONFIGURATION_INCOMPLETE to TRUE.
- 5> if the IE "UE positioning OTDOA neighbour cell list for UE-based" is included and if cell position of less than two neighbour cells of the cells included in this IE and stored in variable UE_POSITIONING_OTDOA_DATA_UE_BASED are different and if those cell positions are not different to the one of the reference cell stored in variable UE_POSITIONING_OTDOA_DATA_UE_BASED:
 - <u>6</u>4> set the variable CONFIGURATION_INCOMPLETE to TRUE.
- 5> if the IE "UE positioning OTDOA neighbouring cell list for UE-based" is included and only two neighbour cells are included or stored in variable UE_POSITIONING_OTDOA_DATA_UE_BASED and if the IE "Round Trip Time" is neither included for the neighbour cells nor for the reference cell info:
 - <u>6</u>4> set the variable CONFIGURATION_INCOMPLETE to TRUE.

10.3.7.13 Inter-frequency cell info list

Contains the information for the list of measurement objects for an inter-frequency measurement.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
CHOICE Inter-frequency cell removal	OP			
>Remove all inter-frequency cells				No data
>Remove some inter-frequency cells				
>>Removed inter-frequency cells	MP	1 <maxcellm eas></maxcellm 		
>>>Inter-frequency cell id	MP		Integer(0 <maxcellme as>-1)</maxcellme 	
>No inter-frequency cells removed				No data
New inter-frequency cells	OP	1 to <maxcellm eas></maxcellm 		
>Inter-frequency cell id	MD		Integer(0 <maxcellme as>-1)</maxcellme 	
>Frequency info	MD		Frequency info 10.3.6.36	Default value is the value of the previous "frequency info" in the list. NOTE: The first occurrence is then MP.
>Cell info	MP		Cell info 10.3.7.2	
Cells for measurement	CV- BCHopt	1 to <maxcellm eas></maxcellm 		
>Inter-frequency cell id	MP		Integer(0 <maxcellme as>-1)</maxcellme 	

Condition	Explanation			
BCHopt	This IE is not needed when sent in SYSTEM			
	INFORMATION. Otherwise, the IE is Optional			

14.1.2.3 Reporting event 1C: A non-active primary CPICH becomes better than an active primary CPICH

When an intra-frequency measurement configuring event 1c is set up, the UE shall:

- 1> create a variable TRIGGERED_1C_EVENT related to that measurement, which shall initially be empty;
- 1> delete this variable when the measurement is released.

When event 1C is configured in the UE, the UE shall:

- 1> if "Measurement quantity" is "pathloss" and Equation 1 below is fulfilled for one or more primary CPICHs, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 2 below is fulfilled for one or more primary CPICHs, for each of these primary CPICHs:
 - 2> if all required reporting quantities are available for that cell; and
 - 2> if the equations have been fulfilled for a time period indicated by "Time to trigger", and if the primary CPICH that is better is not included in the active set but the other primary CPICH is any of the primary CPICHs included in the active set, and if that first primary CPICH is not included in the "cells triggered" in the variable TRIGGERED_1C_EVENT:
 - 3> include that primary CPICH in the "cells recently triggered" in the variable TRIGGERED_1C_EVENT.
- 1> if the value of "Replacement activation threshold" for this event is less than or equal to the current number of cells in the active set or equal to 0 and if any primary CPICHs are stored in the "cells recently triggered" in the variable TRIGGERED_1C_EVENT:
 - 2> if "Reporting interval" for this event is not equal to 0:
 - 3> if the IE "Periodical reporting running" in the variable TRIGGERED_1C_EVENT is set to FALSE:
 - 4> start a timer for with the value of "Reporting interval" for this event and set the IE "Periodical reporting running" in the variable TRIGGERED_1C_EVENT to TRUE.
 - 3> set "sent reports" for that primary CPICH in the variable TRIGGERED_1C_EVENT to 1.
 - 2> send a measurement report with IEs set as below:
 - 3> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1c"; and
 - 3> include in "cell measurement event results" all entries of the "cells recently triggered" in the variable TRIGGERED_1C_EVENT not in the active set as well as the "primary CPICH info" of all the primary CPICHs in the active set for which the measured value is worse (i.e. greater for pathloss and less for the other measurement quantities) than the one of the entry in "cell recently triggered" that has the best measured value taking into account their cell individual offset. The "primary CPICH info" for those cells shall be ordered according to their measured value taking into account their cell individual offset, beginning with the best cell to the worst one;
 - 3> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.
 - 2> move all entries from "cells recently triggered" to "cells triggered" in the variable TRIGGERED_1C_EVENT.
- 1> if the timer for the periodical reporting has expired:
 - 2> if any primary CPICH is included in the "cells triggered" in the variable TRIGGERED_1C_EVENT, and not included in the current active set:
 - 3> if "Reporting interval" for this event is not equal to 0, and if "Amount of reporting" is greater than "sent reports" stored for that primary CPICH, in "cells triggered" in the variable TRIGGERED_1C_EVENT:
 - 4> increment the stored counter "sent reports" for all CPICH in "cell triggered" in variable TRIGGERED_1C_EVENT;

- 4> start a timer with the value of "Reporting interval" for this event;
- 4> send a measurement report with IEs set as below:
 - 5> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1c"; and
 - 5> include in "cell measurement event results" all entries of the variable TRIGGERED_1C_EVENT with value of IE "sent report" smaller than value of "Amount of reporting" and that are not part of the active set as well as the "primary CPICH info" of all the primary CPICHs in the active set for which the measured value is worse (i.e. greater for pathloss and less for the other measurement quantities) than the one of the entry in "cell recently triggered" that has the best measured value, ordering the "primary CPICH info" according to their measured value beginning with the best cell to the worst one, taking into account the cell individual offset for each cell;
 - 5> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.
- 4> if "sent reports" in variable TRIGGERED_1C_EVENT is greater than "Amount of reporting" for all entries:
 - 5> set the IE "Periodical Reporting running" in the variable TRIGGERED_1C_EVENT to FALSE and disable the timer for the periodical reporting.
- 1> if "Measurement quantity" is "pathloss" and Equation 3 below is fulfilled for a primary CPICH, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 4 below is fulfilled for a primary CPICH or;
- 1> if a primary CPICH is added to the active set:
 - 2> if that primary CPICH is included in the "cells triggered" or "cells recently triggered" in the variable TRIGGERED_1C_EVENT:
 - 3> remove the entry of that primary CPICH from "cells triggered" or "cells recently triggered" in the variable TRIGGERED_1C_EVENT.
 - 3> if no entry in the variable TRIGGERED_1C_EVENT has a value of "sent reports" smaller than "Amount of reporting":
 - 4> stop the reporting interval timer;
 - 4> set the IE "Periodical reporting running" in the variable TRIGGERED_1C_EVENT to FALSE.

Equation 1 (Triggering condition for pathloss)

$$10 Log M_{ew} + CIQ_{ew} \le 10 Log M_{hAS} + CIQ_{hAS} - H_{lc}/2$$

Equation 2 (Triggering condition for all the other measurement quantities)

$$10 Log M_{Pew} + CIQ_{Pew} \ge 10 Log M_{PAS} + CIQ_{PAS} + H_{1c}/2$$

Equation 3 (Leaving triggering condition for pathloss)

$$10 Log M_{ew} + CIQ_{ew} > 10 Log M_{pAS} + CIQ_{pAS} + H_{lc}/2$$

Equation 4 (Leaving triggering condition for all the other measurement quantities)

$$10 Log M_{New} + CIQ_{New} < 10 Log M_{MAS} + CIQ_{NAS} - H_{Lc}/2$$

The variables in the formula are defined as follows:

 M_{New} is the measurement result of the cell not included in the active set.

 CIO_{New} is the individual cell offset for the cell becoming better than the cell in the active set if an individual cell offset is stored for that cell. Otherwise it is equal to 0.

For pathloss:

 M_{InAS} is the measurement result of the cell in the active set with the highest measurement result.

For other measurement quantities:

 M_{InAS} is the measurement result of the cell in the active set with the lowest measurement result.

CIO_{tnAS} is the individual cell offset for the cell in the active set that is becoming worse than the new cell.

 H_{1c} is the hysteresis parameter for the event 1c.

If the measurement results are pathloss or CPICH-Ec/No then M_{New} and M_{inAS} are expressed as ratios.

If the measurement result is CPICH-RSCP then M_{New} and M_{inAS} are expressed in mW.

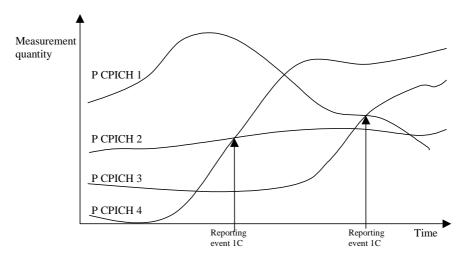


Figure 14.1.2.3-1 [Informative]: A primary CPICH that is not included in the active set becomes better than a primary CPICH that is in the active set

In this figure, the parameters hysteresis and time to trigger, as well as the cell individual offsets for all cells are equal to 0. In this example the cells belonging to primary CPICH 1 and 2 are in the active set, but the cells transmitting primary CPICH 3 and CPICH 4 are not (yet) in the active set.

The first measurement report is sent when primary CPICH 4 becomes better than primary CPICH 2. The "cell measurement event result" of the measurement report contains the information of primary CPICH 4 and CPICH 2.

Assuming that the active set has been updated after the first measurement report (active set is now primary CPICH 1 and primary CPICH 4), the second report is sent when primary CPICH 3 becomes better than primary CPICH 1. The "cell measurement event result" of the second measurement report contains the information of primary CPICH 3 and primary CPICH 1.

14.3.1.1 Event 3a: The estimated quality of the currently used UTRAN frequency is below a certain threshold **and** the estimated quality of the other system is above a certain threshold.

When an inter-RAT measurement configuring event 3a is set up, the UE shall:

1> create a variable TRIGGERED_3A_EVENT related to that measurement, which shall initially be empty;

1> delete this variable when the measurement is released.

When event 3a is configured in the UE within a measurement, the UE shall:

1> if the other RAT is GSM, and if IE "BSIC verification required" is set to "required":

- 2> if equations 1 and 2 below have both been fulfilled for a time period indicated by "Time to trigger" from the same instant, respectively for the used UTRAN frequency and for one or several GSM cells that match any of the BCCH ARFCN and BSIC combinations considered in that inter-RAT measurement:
 - 3> if the Inter-RAT cell id of any of those GSM cells is not stored in the variable TRIGGERED_3A_EVENT:
 - 4> store the Inter-RAT cell ids of the GSM cells that triggered the event and that were not previously stored in the variable TRIGGERED_3A_EVENT into that variable.
 - 4> send a measurement report with IEs set as below:
 - 5> in "inter-RAT measurement event result": "inter-RAT event identity" to "3a", "CHOICE BSIC" to "verified BSIC" and "Inter-RAT cell id" to the GSM cells that triggered the event (best one first), taking into account the cell individual offset of the GSM cells;
 - 5> "measured results" and possible "additional measured results" according to 8.4.2, not taking into account the cell individual offset.
- 2> if equation 4 is fulfilled for a GSM cell whose inter-RAT cell id is stored in the variable TRIGGERED_3A_EVENT:
 - 3> remove the inter-RAT cell id of that GSM cell from the variable TRIGGERED_3A_EVENT.
- 2> if equation 3 is fulfilled for the used frequency in UTRAN:
 - 3> clear the variable TRIGGERED_3A_EVENT.
- 1> if the other RAT is GSM, and if IE "BSIC verification required" is set to "not required":
 - 2> if equations 1 and 2 below have been fulfilled for a time period indicated by "Time to trigger" from the same instant, respectively for the used UTRAN frequency and for one or several BCCH ARFCNs considered in that inter-RAT measurement:
 - 3> if any of those BCCH ARFCNs is not stored into the variable TRIGGERED_3A_EVENT:
 - 4> store the BCCH ARFCNs that triggered the event and that were not previously stored in the variable TRIGGERED_3A_EVENT into that variable;
 - 4> send a measurement report with IEs set as below:
 - 5> in "inter-RAT measurement event result": "inter-RAT event identity" to "3a", "CHOICE BSIC" to "non verified BSIC" and "BCCH ARFCN" to BCCH ARFCNs that triggered the event (best one first), taking into account the cell individual offset of the GSM cells;
 - 5> "measured results" and possible "additional measured results" according to 8.4.2, not taking into account the cell individual offset.
 - 2> if equation 4 is fulfilled for a BCCH ARFCN that is stored in the variable TRIGGERED 3A EVENT:
 - 3> remove that BCCH ARFCN from the variable TRIGGERED_3A_EVENT.
 - 2> if equation 3 is fulfilled for the used frequency in UTRAN:
 - 3> clear the variable TRIGGERED_3A_EVENT.

Triggering conditions:

Equation 1:

$$Q_{Used} \leq T_{Used} - H_{3a}/2$$

The variables in the formula are defined as follows:

 Q_{Used} is the quality estimate of the used UTRAN frequency.

 T_{Used} is the absolute threshold that applies for the used frequency in that measurement.

 H_{3a} is the hysteresis parameter for event 3a.

Equation 2:

$$M_{OtherRAT} + CIQ_{theRAT} \ge T_{OtherRAT} + H_{3a}/2$$

The variables in the formula are defined as follows:

 $M_{Other\,RAT}$ is the measurement quantity for the cell of the other system.

<u>CIO</u>_{Other RAT} is the cell individual offset for the cell of the other system.

 $T_{Other\ RAT}$ is the absolute threshold that applies for the other system in that measurement.

 H_{3a} is the hysteresis parameter for event 3a.

Leaving triggered state conditions:

Equation 3:

$$Q_{Used} > T_{Used} + H_{3a}/2$$

The variables in the formula are defined as follows:

 Q_{Used} is the quality estimate of the used UTRAN frequency.

 T_{Used} is the absolute threshold that applies for the used frequency in that measurement.

 H_{3a} is the hysteresis parameter for event 3a.

Equation 4:

$$M_{OtherRAT} + CIQ_{theRAT} < T_{OtherRAT} - H_{3a}/2$$

The variables in the formula are defined as follows:

 $M_{Other\ RAT}$ is the measurement quantity for the cell of the other system. $M_{Other\ RAT}$ is expressed in dBm.

 $CIO_{Other\ RAT}$ is the cell individual offset for the cell of the other system.

 $T_{Other\,RAT}$ is the absolute threshold that applies for the other system in that measurement.

 H_{3a} is the hysteresis parameter for event 3a.

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	(CHANGE	REQ	UES	ST T			CR-Form-v7
*	25.331 CR	1770	жrev	- 3	Current v	ersion:	3.12.0	¥

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the **%** symbols.

Proposed chang	ge a	affects:	UICC apps#		ME X Radio Ad	cess Netwo	rk X Core Netw	ork
Title:	ж	Numbe	ring of "ASC Se	ettina" IEs i	ncluded in "PRA	CH partition	na" IE	
			9	J			3	
Source:	ж	Qualco	mm					
Work item code	:#	TEI				Date: ℜ	12 November 2	.002
Category:	\mathfrak{H}	F				Release: #	R99	
		Use <u>one</u>	of the following c	ategories:		Use <u>one</u> of	the following releas	es:
		F (0	orrection)			2	(GSM Phase 2)	
		A (0	corresponds to a	correction in	an earlier release) R96	(Release 1996)	
		B (8	addition of feature	<i>e),</i>		R97	(Release 1997)	
		C (f	unctional modific	ation of featu	ıre)	R98	(Release 1998)	
		D (6	editorial modificat	ion)		R99	(Release 1999)	
		Detailed 6	explanations of th	ne above cat	egories can	Rel-4	(Release 4)	
		be found	in 3GPP <u>TR 21.9</u>	<u>000</u> .		Rel-5	(Release 5)	
						Rel-6	(Release 6)	

Reason for change:

- 1. The UE behaviour is not clear when UTRAN tries to use an ASC which is undefined (the number of ASCs is lower than 8)
- 2. The numbering of ASCs could be implicitly defined by the order in the IE "PRACH partitioning" or by the ordering of the valid ASCs included in the "AC-to-ASC mapping" IE.

Summary of change: ₩

- 1. It is clarified that if UTRAN uses (AC-to-ASC mapping) an undefined ASC, the UE behaviour is uspecified.
- 2. It is clarified that the numbering of the ASCs is defined by the order in which the IEs "ASC Setting" appear in the IE "PRACH partitioning".

Isolated Impact Change Analysis.

These changes clarify the RACH procedures.

- 1. If UTRAN does not implement the PRACH procedure according to this CR, it could assign unspecified ASCs to a compliant UE. The UE could in these cases behave erratically.
- 2. If UTRAN does not implement this CR and the UE does, the ASC settings assigned to a particular UE could not be the intended ones, resulting in a QoS degradation while in CELL_FACH state. The different interpretation of the numbering could also lead to the issue 1 above, which could result in erratic UE behaviour.

It would not affect implementations behaving like indicated in the CR, it would affect implementations supporting the corrected functionality otherwise.

Impact on Test Specifications

None. The tests currently defined for ASC testing (TS 34.123-1) are not affected by these changes.

Consequences if not approved:

 UTRAN implementations may try to assign undefined ASCs in the erroneous understanding that a default configuration should be used in such cases. The UE that have correctly implemented the specs would behave erratically in such cases.

2. If UTRAN and UE have a different understanding of the ASC numbering, the UE may not use the intended ASC settings, resulting in a degraded QoS when in CELL_FACH state. Moreover, if the ASC numbering is not univocous, it is more likely that an invalid ASC could be assigned, resulting in the problem of issue 1 above.

Clauses affected:	8.5.12, 8.5.13, 10.3.6.53, 11.3
Other specs affected:	Y N X Other core specifications Test specifications O&M Specifications
Other comments:	*

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

[...]

8.5.12 Establishment of Access Service Classes

The PRACH resources (i.e. access slots and preamble signatures for FDD), timeslot (with specific frame allocation and channelisation code for TDD) may be divided between different Access Service Classes in order to provide different priorities of RACH usage. It is possible for more than one ASC or for all ASCs to be assigned to the same access slot/signature space in FDD or frame allocation in TDD.

Access Service Classes shall be numbered in the range $0 \le i \le \text{NumASC} \le 7$ (i.e. the maximum number of ASCs is 8). An ASC is defined by an identifier, i, that defines a certain partition of the PRACH resources and an associated persistence value P_i . A set of ASC parameters consists of "NumASC+1" such parameters (i, P_i) , i = 0, ..., NumASC.

PRACH partitions shall be established using the information element "PRACH partitioning". The persistence values P_i to be associated with each ASC shall be derived from the dynamic persistence level N = 1,..., 8 which is broadcast in SIB 7, and the persistence scaling factors s_i , broadcast in System Information Block Type 5 and possibly also in System Information Block Type 6, as follows:

$$P(N) = 2^{-(N-1)}$$

ASC # i	0	1	2	3	4	5	6	7
P_{i}	1	P(N)	s ₂ P(N)	s ₃ P(N)	s ₄ P(N)	s ₅ P(N)	s ₆ P(N)	s ₇ P(N)

Scaling factors s_i are provided optionally for i = 2,..., NumASC, where NumASC+1 is the number of ASCs as defined by PRACH partitioning. If no scaling factors are broadcast, default value 1 shall be used if NumASC ≥ 2 .

If $k \ge 1$ scaling factors are broadcast and NumASC $\ge k+2$ then the last scaling factor s_{k+1} shall be used as default for the ASCs where i > k+1.

The set of ASC parameters is provided to MAC with the CMAC-Config-REQ primitive (see [15]), the PRACH partitioning is provided to PHY using the CPHY-RL-Setup-REQ primitive (see [34]).

The ASC enumeration shall be such that it corresponds to the order of priority (ASC 0 = highest priority, ASC 7 = lowest priority). ASC 0 shall be used in case of Emergency Call or for reasons with equivalent priority.

ASCs are numbered according to order in which the IEs "ASC Setting" appear in the IE "PRACH partitioning", where the first IE "ASC Setting" describes ASC 0, the second IE "ASC Setting" describes ASC 1, etc.

At radio bearer setup/reconfiguration each involved logical channel is assigned a MAC Logical channel Priority (MLP) in the range 1,...,8. When the MAC sublayer is configured for RACH transmission in the UE, these MLP levels shall be employed for ASC selection on MAC.

8.5.13 Mapping of Access Classes to Access Service Classes

Access Classes shall only be applied at initial access, i.e. when sending an RRC CONNECTION REQUEST message. A mapping between Access Class (AC) and Access Service Class (ASC) shall be indicated by the information element "AC-to-ASC mapping" in System Information Block type 5. The correspondence between AC and ASC shall be indicated as follows.

A	;	0 - 9	10	11	12	13	14	15
AS	С	1 st IE	2 nd IE	3 rd IE	4 th IE	5 th IE	6 th IE	7 th IE

In the table, " n^{th} IE" designates an ASC number i in the range 0 - 7 to AC. If the ASC indicated by the " n^{th} IE" is undefined, the UE behaviour is unspecified.

For the random access, the parameters implied by the respective ASC shall be employed. In case the UE is member of several ACs it shall select the ASC for the highest AC number. In connected mode, AC shall not be applied.

[...]

10.3.6.53 PRACH partitioning

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Access Service class	MP	1 to maxASC		If only "NumASC+1" (with, NumASC+1 < maxASC) ASCs are listed, the remaining (NumASC+2 through maxASC) ASCs are unspecified.
ASC Setting	MD		ASC setting 10.3.6.6	The default values are same as the previous ASC. If the "default" is used for the first ASC, the default values are all available signatures and "all available subchannels" for FDD and "all available channelisation codes" and "all available subchannels" with "subchannel size=Size 1" in TDD.

11.3 Information element definitions

```
[...]
ASCSetting-FDD ::=
                                        SEQUENCE {
     -- TABULAR: accessServiceClass-FDD is MD in tabular description
    -- Default value is previous ASC
    -- If this is the first ASC, the default value is all available signature and sub-channels
    accessServiceClass-FDD
                                            AccessServiceClass-FDD OPTIONAL
ASCSetting-TDD ::=
                                        SEQUENCE {
    -- TABULAR: accessServiceClass-TDD is MD in tabular description
   -- Default value is previous ASC
    -- If this is the first ASC, the default value is all available channelisation codes and
    -- all available sub-channels with subchannelSize=size1.
    accessServiceClass-TDD
                                            AccessServiceClass-TDD OPTIONAL
[...]
PRACH-Partitioning ::=
                                    CHOICE {
                                        SEQUENCE (SIZE (1..maxASC)) OF
    fdd
    -- TABULAR: If only "NumASC+1" (with, NumASC+1 < maxASC) ASCSetting-FDD are listed,
    -- the remaining (NumASC+2 through maxASC) ASCs are unspecified.
                                            ASCSetting-FDD,
                                        SEQUENCE (SIZE (1..maxASC)) OF
    -- TABULAR: If only "NumASC+1" (with, NumASC+1 < maxASC) ASCSetting-TDD are listed,
    -- the remaining (NumASC+2 through maxASC) ASCs are unspecified.
                                            ASCSetting-TDD
[...]
```

3GPP TSG-RAN2 Meeting #33 Sophia Antipolis, France, 12-15 November, 2002

		CHANGE	REQ	UE	ST	•		CR-Form-v7
\mathbf{x}	25.331	CR <mark>1771</mark>	жrev	-	ж	Current version:	4.7.0	#

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the **%** symbols.

Proposed chang	affects: UICC apps器 ME	X Radio Access Netwo	rk X Core Network
Title:	Numbering of "ASC Setting" IEs incl	uded in "PRACH partitioni	ng" IE
Source:	Qualcomm		
Work item code:	TEI	<i>Date:</i>	12 November 2002
			5.14
Category:	A	Release: #	
	Use <u>one</u> of the following categories:		the following releases:
	F (correction)	2	(GSM Phase 2)
	A (corresponds to a correction in an	,	(Release 1996)
	B (addition of feature),	R97	(Release 1997)
	C (functional modification of feature)		(Release 1998)
	D (editorial modification)	R99	(Release 1999)
	Detailed explanations of the above category		(Release 4)
	be found in 3GPP <u>TR 21.900</u> .	Rel-5	(Release 5)
		Rel-6	(Release 6)

Reason for change:

- 1. The UE behaviour is not clear when UTRAN tries to use an ASC which is undefined (the number of ASCs is lower than 8)
- 2. The numbering of ASCs could be implicitly defined by the order in the IE "PRACH partitioning" or by the ordering of the valid ASCs included in the "AC-to-ASC mapping" IE.

Summary of change: ₩

- 1. It is clarified that if UTRAN uses (AC-to-ASC mapping) an undefined ASC, the UE behaviour is uspecified.
- 2. It is clarified that the numbering of the ASCs is defined by the order in which the IEs "ASC Setting" appear in the IE "PRACH partitioning".

Isolated Impact Change Analysis.

These changes clarify the RACH procedures.

- 1. If UTRAN does not implement the PRACH procedure according to this CR, it could assign unspecified ASCs to a compliant UE. The UE could in these cases behave erratically.
- 2. If UTRAN does not implement this CR and the UE does, the ASC settings assigned to a particular UE could not be the intended ones, resulting in a QoS degradation while in CELL_FACH state. The different interpretation of the numbering could also lead to the issue 1 above, which could result in erratic UE behaviour.

It would not affect implementations behaving like indicated in the CR, it would affect implementations supporting the corrected functionality otherwise.

Impact on Test Specifications

None. The tests currently defined for ASC testing (TS 34.123-1) are not affected by these changes.

Consequences if not approved:

 UTRAN implementations may try to assign undefined ASCs in the erroneous understanding that a default configuration should be used in such cases. The UE that have correctly implemented the specs would behave erratically in such cases.

2. If UTRAN and UE have a different understanding of the ASC numbering, the UE may not use the intended ASC settings, resulting in a degraded QoS when in CELL_FACH state. Moreover, if the ASC numbering is not univocous, it is more likely that an invalid ASC could be assigned, resulting in the problem of issue 1 above.

Clauses affected:	第 8.5.12, 8.5.13, 10.3.6.53, 11.3
Other specs affected:	Y N X Other core specifications Test specifications O&M Specifications
Other comments:	#

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- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
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- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

[...]

8.5.12 Establishment of Access Service Classes

The PRACH resources (i.e. access slots and preamble signatures for FDD), timeslot (with specific frame allocation and channelisation code for 3.84 Mcps TDD and SYNC_UL codes (with specific frame allocation) for 1.28 Mcps TDD) may be divided between different Access Service Classes in order to provide different priorities of RACH usage. It is possible for more than one ASC or for all ASCs to be assigned to the same access slot/signature space in FDD or frame allocation/channelisation codes in 3.84 Mcps TDD or frame allocation/SYNC_UL codes in 1.28 Mcps TDD.

Access Service Classes shall be numbered in the range $0 \le i \le \text{NumASC} \le 7$ (i.e. the maximum number of ASCs is 8). An ASC is defined by an identifier, i, that defines a certain partition of the PRACH resources (SYNC_UL resources in 1.28 Mcps TDD) and an associated persistence value P_i . A set of ASC parameters consists of "NumASC+1" such parameters (i, P_i) , i = 0, ..., NumASC.

PRACH partitions shall be established using the information element "PRACH partitioning". The persistence values P_i to be associated with each ASC shall be derived from the dynamic persistence level N = 1,..., 8 which is broadcast in SIB 7, and the persistence scaling factors s_i , broadcast in System Information Block Type 5 and possibly also in System Information Block Type 6, as follows:

$$P(N) = 2^{-(N-1)}$$

ASC # i	0	1	2	3	4	5	6	7
Pi	1	P(N)	s ₂ P(N)	s ₃ P(N)	s ₄ P(N)	s ₅ P(N)	s ₆ P(N)	s ₇ P(N)

Scaling factors s_i are provided optionally for i = 2,..., NumASC, where NumASC+1 is the number of ASCs as defined by PRACH partitioning. If no scaling factors are broadcast, default value 1 shall be used if NumASC ≥ 2 .

If $k \ge 1$ scaling factors are broadcast and NumASC $\ge k+2$ then the last scaling factor s_{k+1} shall be used as default for the ASCs where i > k+1.

The set of ASC parameters is provided to MAC with the CMAC-Config-REQ primitive (see [15]), the PRACH partitioning is provided to PHY using the CPHY-RL-Setup-REQ primitive (see [34]).

The ASC enumeration shall be such that it corresponds to the order of priority (ASC 0 = highest priority, ASC 7 = lowest priority). ASC 0 shall be used in case of Emergency Call or for reasons with equivalent priority.

ASCs are numbered according to order in which the IEs "ASC Setting" appear in the IE "PRACH partitioning", where the first IE "ASC Setting" describes ASC 0, the second IE "ASC Setting" describes ASC 1, etc.

At radio bearer setup/reconfiguration each involved logical channel is assigned a MAC Logical channel Priority (MLP) in the range 1,...,8. When the MAC sublayer is configured for RACH transmission in the UE, these MLP levels shall be employed for ASC selection on MAC.

8.5.13 Mapping of Access Classes to Access Service Classes

Access Classes shall only be applied at initial access, i.e. when sending an RRC CONNECTION REQUEST message. A mapping between Access Class (AC) and Access Service Class (ASC) shall be indicated by the information element "AC-to-ASC mapping" in System Information Block type 5. The correspondence between AC and ASC shall be indicated as follows.

Ī	AC	0 - 9	10	11	12	13	14	15
Ī	ASC	1 st IE	2 nd IE	3 rd IE	4 th IE	5 th IE	6 th IE	7 th IE

In the table, " n^{th} IE" designates an ASC number i in the range 0 - 7 to AC. If the ASC indicated by the " n^{th} IE" is undefined, the UE behaviour is unspecified.

For the random access, the parameters implied by the respective ASC shall be employed. In case the UE is member of several ACs it shall select the ASC for the highest AC number. In connected mode, AC shall not be applied.

[...]

10.3.6.53 PRACH partitioning

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Access Service class	MP	1 to maxASC		If only "NumASC+1" (with, NumASC+1 < maxASC) ASCs are listed, the remaining (NumASC+2 through maxASC) ASCs are unspecified.
ASC Setting	MD		ASC setting 10.3.6.6	The default values are same as the previous ASC. If the "default" is used for the first ASC, the default values are all available signatures and "all available subchannels" for FDD and "all available channelisation codes" and "all available subchannels" with "subchannel size=Size 1" in TDD.

[...]

11.3 Information element definitions

```
[...]
ASCSetting-FDD ::=
                                        SEQUENCE {
     -- TABULAR: accessServiceClass-FDD is MD in tabular description
    -- Default value is previous ASC
    -- If this is the first ASC, the default value is all available signature and sub-channels
                                            AccessServiceClass-FDD OPTIONAL
    accessServiceClass-FDD
ASCSetting-TDD ::=
                                        SEQUENCE {
    -- TABULAR: accessServiceClass-TDD is MD in tabular description
    -- Default value is previous ASC
    -- If this is the first ASC, the default value is all available channelisation codes and
    -- all available sub-channels with subchannelSize=size1.
    accessServiceClass-TDD
                                            AccessServiceClass-TDD OPTIONAL
[...]
PRACH-Partitioning ::=
                                    CHOICE {
                                        SEQUENCE (SIZE (1..maxASC)) OF
    fdd
    -- TABULAR: If only "NumASC+1" (with, NumASC+1 < maxASC) ASCSetting-FDD are listed,
    -- the remaining (NumASC+2 through maxASC) ASCs are unspecified.
                                            ASCSetting-FDD,
                                        SEOUENCE (SIZE (1..maxASC)) OF
    -- TABULAR: If only "NumASC+1" (with, NumASC+1 < maxASC) ASCSetting-TDD are listed,
    -- the remaining (NumASC+2 through maxASC) ASCs are unspecified.
                                            ASCSetting-TDD
}
PRACH-Partitioning-LCR-r4 ::=
                                   SEQUENCE (SIZE (1..maxASC)) OF
   -- TABULAR: If only "NumASC+1" (with, NumASC+1 < maxASC) ASCSetting-TDD-LCR-r4 are listed,
    -- the remaining (NumASC+2 through maxASC) ASCs are unspecified.
                                            ASCSetting-TDD-LCR-r4
[...]
```

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	(CHANG	E REQ	UE	ST	•		CR-Form-v7
*	25.331 CR	1772	ж rev	-	¥	Current version:	5.2.0	#

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the \$\mathbb{X}\$ symbols.

Proposed chang	ge a	affects: UICC apps器 ME X Radio A	ccess N	letwor	k X Core Network
Title:	ж	Numbering of "ASC Setting" IEs included in "PRA	ACH par	rtitionii	ng" IE
Source:	\mathfrak{R}	Qualcomm			
Work item code.	:Ж	TEI	Da	ıte: ૠ	12 November 2002
Category:	\mathfrak{R}	A	Releas	se: ૠ	Rel-5
		Use <u>one</u> of the following categories:	Use <u>c</u>	<u>one</u> of	the following releases:
		F (correction)	2		(GSM Phase 2)
		A (corresponds to a correction in an earlier releas	e) Rs	96	(Release 1996)
		B (addition of feature),	R	97	(Release 1997)
		C (functional modification of feature)	R	98	(Release 1998)
		D (editorial modification)	R	99	(Release 1999)
		Detailed explanations of the above categories can	Re	e <i>l-4</i>	(Release 4)
		be found in 3GPP <u>TR 21.900</u> .	Re	e <i>l-5</i>	(Release 5)
			D.	~1.6	(Dologoo C)

Reason for change:

- 1. The UE behaviour is not clear when UTRAN tries to use an ASC which is undefined (the number of ASCs is lower than 8)
- 2. The numbering of ASCs could be implicitly defined by the order in the IE "PRACH partitioning" or by the ordering of the valid ASCs included in the "AC-to-ASC mapping" IE.

Summary of change: ₩

- 1. It is clarified that if UTRAN uses (AC-to-ASC mapping) an undefined ASC, the UE behaviour is uspecified.
- 2. It is clarified that the numbering of the ASCs is defined by the order in which the IEs "ASC Setting" appear in the IE "PRACH partitioning".

Isolated Impact Change Analysis.

These changes clarify the RACH procedures.

- 1. If UTRAN does not implement the PRACH procedure according to this CR, it could assign unspecified ASCs to a compliant UE. The UE could in these cases behave erratically.
- 2. If UTRAN does not implement this CR and the UE does, the ASC settings assigned to a particular UE could not be the intended ones, resulting in a QoS degradation while in CELL_FACH state. The different interpretation of the numbering could also lead to the issue 1 above, which could result in erratic UE behaviour.

It would not affect implementations behaving like indicated in the CR, it would affect implementations supporting the corrected functionality otherwise.

Impact on Test Specifications

None. The tests currently defined for ASC testing (TS 34.123-1) are not affected by these changes.

Consequences if not approved:

 UTRAN implementations may try to assign undefined ASCs in the erroneous understanding that a default configuration should be used in such cases. The UE that have correctly implemented the specs would behave erratically in such cases.

2. If UTRAN and UE have a different understanding of the ASC numbering, the UE may not use the intended ASC settings, resulting in a degraded QoS when in CELL_FACH state. Moreover, if the ASC numbering is not univocous, it is more likely that an invalid ASC could be assigned, resulting in the problem of issue 1 above.

Clauses affected:	第 8.5.12, 8.5.13, 10.3.6.53, 11.3
Other specs affected:	Y N X Other core specifications Test specifications O&M Specifications
Other comments:	#

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

[...]

8.5.12 Establishment of Access Service Classes

The PRACH resources (i.e. access slots and preamble signatures for FDD), timeslot (with specific frame allocation and channelisation code for 3.84 Mcps TDD and SYNC_UL codes (with specific frame allocation) for 1.28 Mcps TDD) may be divided between different Access Service Classes in order to provide different priorities of RACH usage. It is possible for more than one ASC or for all ASCs to be assigned to the same access slot/signature space in FDD or frame allocation/channelisation codes in 3.84 Mcps TDD or frame allocation/SYNC_UL codes in 1.28 Mcps TDD.

Access Service Classes shall be numbered in the range $0 \le i \le \text{NumASC} \le 7$ (i.e. the maximum number of ASCs is 8). An ASC is defined by an identifier, i, that defines a certain partition of the PRACH resources (SYNC_UL resources in 1.28 Mcps TDD) and an associated persistence value P_i . A set of ASC parameters consists of "NumASC+1" such parameters (i, P_i) , i = 0, ..., NumASC.

PRACH partitions shall be established using the information element "PRACH partitioning". The persistence values P_i to be associated with each ASC shall be derived from the dynamic persistence level N = 1,..., 8 which is broadcast in SIB 7, and the persistence scaling factors s_i , broadcast in System Information Block Type 5 and possibly also in System Information Block Type 6, as follows:

$$P(N) = 2^{-(N-1)}$$

ASC # i	0	1	2	3	4	5	6	7
Pi	1	P(N)	s ₂ P(N)	s ₃ P(N)	s ₄ P(N)	s ₅ P(N)	s ₆ P(N)	s ₇ P(N)

Scaling factors s_i are provided optionally for i = 2,..., NumASC, where NumASC+1 is the number of ASCs as defined by PRACH partitioning. If no scaling factors are broadcast, default value 1 shall be used if NumASC ≥ 2 .

If $k \ge 1$ scaling factors are broadcast and NumASC $\ge k+2$ then the last scaling factor s_{k+1} shall be used as default for the ASCs where i > k+1.

The set of ASC parameters is provided to MAC with the CMAC-Config-REQ primitive (see [15]), the PRACH partitioning is provided to PHY using the CPHY-RL-Setup-REQ primitive (see [34]).

The ASC enumeration shall be such that it corresponds to the order of priority (ASC 0 = highest priority, ASC 7 = lowest priority). ASC 0 shall be used in case of Emergency Call or for reasons with equivalent priority.

ASCs are numbered according to order in which the IEs "ASC Setting" appear in the IE "PRACH partitioning", where the first IE "ASC Setting" describes ASC 0, the second IE "ASC Setting" describes ASC 1, etc.

At radio bearer setup/reconfiguration each involved logical channel is assigned a MAC Logical channel Priority (MLP) in the range 1,...,8. When the MAC sublayer is configured for RACH transmission in the UE, these MLP levels shall be employed for ASC selection on MAC.

8.5.13 Mapping of Access Classes to Access Service Classes

Access Classes shall only be applied at initial access, i.e. when sending an RRC CONNECTION REQUEST message. A mapping between Access Class (AC) and Access Service Class (ASC) shall be indicated by the information element "AC-to-ASC mapping" in System Information Block type 5. The correspondence between AC and ASC shall be indicated as follows.

Ī	AC	0 - 9	10	11	12	13	14	15
Ī	ASC	1 st IE	2 nd IE	3 rd IE	4 th IE	5 th IE	6 th IE	7 th IE

In the table, " n^{th} IE" designates an ASC number i in the range 0 - 7 to AC. If the ASC indicated by the " n^{th} IE" is undefined, the UE behaviour is unspecified.

For the random access, the parameters implied by the respective ASC shall be employed. In case the UE is member of several ACs it shall select the ASC for the highest AC number. In connected mode, AC shall not be applied.

8.5.12 Establishment of Access Service Classes

The PRACH resources (i.e. access slots and preamble signatures for FDD), timeslot (with specific frame allocation and channelisation code for TDD) may be divided between different Access Service Classes in order to provide different priorities of RACH usage. It is possible for more than one ASC or for all ASCs to be assigned to the same access slot/signature space in FDD or frame allocation in TDD.

Access Service Classes shall be numbered in the range $0 \le i \le \text{NumASC} \le 7$ (i.e. the maximum number of ASCs is 8). An ASC is defined by an identifier, i, that defines a certain partition of the PRACH resources and an associated persistence value P_i . A set of ASC parameters consists of "NumASC+1" such parameters (i, P_i) , i = 0, ..., NumASC.

PRACH partitions shall be established using the information element "PRACH partitioning". The persistence values P_i to be associated with each ASC shall be derived from the dynamic persistence level N = 1, ..., 8 which is broadcast in SIB 7, and the persistence scaling factors s_i , broadcast in System Information Block Type 5 and possibly also in System Information Block Type 6, as follows:

$$P(N) = 2^{-(N-1)}$$

ASC # i	0	1	2	3	4	5	6	7
Pi	1	P(N)	s ₂ P(N)	s ₃ P(N)	s ₄ P(N)	s ₅ P(N)	s ₆ P(N)	s ₇ P(N)

Scaling factors s_i are provided optionally for i = 2,..., NumASC, where NumASC+1 is the number of ASCs as defined by PRACH partitioning. If no scaling factors are broadcast, default value 1 shall be used if NumASC ≥ 2 .

If $k \ge 1$ scaling factors are broadcast and NumASC $\ge k+2$ then the last scaling factor s_{k+1} shall be used as default for the ASCs where i > k+1.

The set of ASC parameters is provided to MAC with the CMAC-Config-REQ primitive (see [15]), the PRACH partitioning is provided to PHY using the CPHY-RL-Setup-REQ primitive (see [34]).

The ASC enumeration shall be such that it corresponds to the order of priority (ASC 0 = highest priority, ASC 7 = lowest priority). ASC 0 shall be used in case of Emergency Call or for reasons with equivalent priority.

ASCs are numbered according to order in which the IEs "ASC Setting" appear in the IE "PRACH partitioning", whereas the first IE "ASC Setting" describes ASC 0, the second IE "ASC Setting" describes ASC 1, etc.

At radio bearer setup/reconfiguration each involved logical channel is assigned a MAC Logical channel Priority (MLP) in the range 1,...,8. When the MAC sublayer is configured for RACH transmission in the UE, these MLP levels shall be employed for ASC selection on MAC.

[...]

10.3.6.53 PRACH partitioning

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Access Service class	MP	1 to maxASC		If only "NumASC+1" (with, NumASC+1 < maxASC) ASCs are listed, the remaining (NumASC+2 through maxASC) ASCs are unspecified.
ASC Setting	MD		ASC setting 10.3.6.6	The default values are same as the previous ASC. If the "default" is used for the first ASC, the default values are all available signatures and "all available subchannels" for FDD and "all available channelisation codes" and "all available subchannels" with "subchannel size=Size 1" in TDD.

[...]

Information element definitions 11.3

```
[...]
PRACH-Partitioning ::=
                                        CHOICE {
                                            SEQUENCE (SIZE (1..maxASC)) OF
     -- TABULAR: If only "NumASC+1" (with, NumASC+1 < maxASC) ASCSetting-FDD are listed,
    -- the remaining (NumASC+2 through maxASC) ASCs are unspecified.
                                                 ASCSetting-FDD,
                                             SEQUENCE (SIZE (1..maxASC)) OF
    -- TABULAR: If only "NumASC+1" (with, NumASC+1 < maxASC) ASCSetting-TDD are listed, -- the remaining (NumASC+2 through maxASC) ASCs are unspecified.
                                                 ASCSetting-TDD
}
PRACH-Partitioning-LCR-r4 ::=
                                        SEQUENCE (SIZE (1..maxASC)) OF
    -- TABULAR: If only "NumASC+1" (with, NumASC+1 < maxASC) ASCSetting-TDD-LCR-r4 are listed,
     -- the remaining (NumASC+2 through maxASC) ASCs are unspecified.
                                                 ASCSetting-TDD-LCR-r4
[...]
```

3GPP TSG-RAN WG2 Meeting #33 Sophia Antipolis, France, 12-15 November 2002

Tdoc # R2-023280

CR-Form-v7

CHANGE REQUEST

 \mathfrak{R}

25.331 CR 1777

rev

Current version: 3.12.0 #

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the # symbols.

UICC apps# ME X Radio Access Network X Core Network Proposed change affects:

Title: Correction on support for compressed mode Mitsubishi Electric (METE-RD), Motorola, Nortel, Siemens Source: Date: # 15/11/2002 Work item code: ₩ TEI F Category: Release: # R99 Use <u>one</u> of the following categories: Use <u>one</u> of the following releases: **F** (correction) (GSM Phase 2) 2 **A** (corresponds to a correction in an earlier release) R96 (Release 1996) B (addition of feature), R97 (Release 1997) **C** (functional modification of feature) (Release 1998) R98 **D** (editorial modification) R99 (Release 1999) Detailed explanations of the above categories can Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5) Rel-6 (Release 6)

Reason for change:

- It is unclear whether the UE shall support compressed mode when it does not need it. A widely spread misunderstanding was that support for compressed was not mandated when compressed mode is not needed.
- The current "DPCH Compressed mode info" consistency check procedure is using the CELL_INFO_LIST which may be not available or complete at the time of compressed mode configuration
- 3) The IE "Current TGPS Status Flag" is not updated after an activation of the corresponding TGPS

- Summary of change: \$\mathbb{X} 1) UE shall reject a compressed mode configuration when it does not need compressed mode for any supported band of the RAT or UTRA mode related to the measurement and a direction for which the CM pattern is configured
 - UE shall reject a compressed mode configuration when it needs compressed mode for all supported band of the RAT or UTRA mode related to the measurement and a direction, and the configured CM pattern does not provide that direction.
 - 2) Reference to CELL INFO LIST is removed from the "DPCH Compressed mode info" consistency check procedure, and check procedure is based only on UE measurement capability and on transmission gap measurement purpose.
 - 3) 8.6.6.15: The IE "Current TGPS Status Flag" is set to "active"

Isolated Impact Analysis

Functionality corrected: Compressed mode meaurements on inter-frequency and inter-RAT cells.

Isolated impact statement: Correction to a function where specification was missing

procedural text. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.

Consequences if not approved:

1&2)If the CR is not approved it will not be clear from the RRC specification that the UE is not required to support compressed mode for the cases that it signals in its UE capabilities that it does not need compressed mode for any band of the same RAT or UTRA mode. If the network were to attempt to activate compressed mode for a case that it is not supported by the UE then the inter-frequency or inter-RAT measurements will fail.

Also it will not be completely clear under which conditions the UE is permitted to reject a compressed mode configuration. If the UE were to reject a configuration that it should be accept then the inter-frequencies or inter-RAT measurements would fail.

3) Section 8.6.6.15 is not aligned with section 8.4.1.3. Unexpected UE behaviour for compressed may result from this when implementation follows incorrect 8.6.6.15.

Clauses affected:	8.4.1.3 , 8.6.6.15
Other specs affected:	Y N X Other core specifications Test specifications O&M Specifications
Other comments:	#

How to create CRs using this form:

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- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.4.1.3 Reception of MEASUREMENT CONTROL by the UE

Upon reception of a MEASUREMENT CONTROL message the UE shall perform actions specified in subclause 8.6 unless otherwise specified below.

The UE shall:

- 1> read the IE "Measurement command";
- 1> if the IE "Measurement command" has the value "setup":
 - 2> store this measurement in the variable MEASUREMENT_IDENTITY according to the IE "measurement identity", first releasing any previously stored measurement with that identity if that exists;
 - 2> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
 - 3> if the UE is in CELL_FACH state:
 - 4> the UE behaviour is not specified.
 - 2> for measurement types "inter-RAT measurement" or "inter-frequency measurement":
 - 3> if, according to its measurement capabilities, the UE requires compressed mode to perform that measurement type and a compressed mode pattern sequence with an appropriate measurement purpose is simultaneously activated by the IE "DPCH compressed mode status info"; or
 - 3> if, according to its measurement capabilities, the UE does not require compressed mode to perform the measurements on at least one supported band of that measurement type:
 - 4> if the measurement is valid in the current RRC state of the UE:
 - 5> begin measurements according to the stored control information for this measurement identity.
 - NOTE: The UE is not required to perform measurements on cells for which it needs compressed mode but a suitable compressed mode pattern is not activated.
 - 2> for measurement type "UE positioning measurement":
 - 3> if the UE is in CELL_FACH state:
 - 4> if IE "Positioning Method" is set to "OTDOA":
 - 5> if IE "Method Type" is set to "UE assisted":
 - 6> if IE "UE positioning OTDOA assistance data for UE assisted" is not included:
 - 7> if System Information Block type 15.4 is broadcast:
 - 8> read System Information Block type 15.4.
 - 7> act as specified in subclause 8.6.7.19.2.
 - 5> if IE "Method Type" is set to "UE based":
 - 6> if IE "UE positioning OTDOA assistance data for UE based" is not included:
 - 7> if System Information Block type 15.5 is broadcast:
 - 8> read System Information Block type 15.5.
 - 7> act as specified in subclause 8.6.7.19.2a.
 - 2> for any other measurement type:
 - 3> if the measurement is valid in the current RRC state of the UE:
 - 4> begin measurements according to the stored control information for this measurement identity.

- 1> if the IE "Measurement command" has the value "modify":
 - 2> for all IEs present in the MEASUREMENT CONTROL message:
 - 3> if a measurement was stored in the variable MEASUREMENT_IDENTITY associated to the identity by the IE "measurement identity":
 - 4> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
 - 5> if the UE is in CELL_FACH state:
 - 6> the UE behaviour is not specified.
 - 4> if measurement type is set to "intra-frequency measurement", for any of the optional IEs "Intra-frequency measurement objects list", "Intra-frequency measurement quantity", "Intra-frequency reporting quantity", "Measurement Validity", "report criteria" and "parameters required for each event" (given "report criteria" is set to "intra-frequency measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "inter-frequency measurement", for any of the optional IEs "Inter-frequency measurement quantity", "Inter-frequency reporting quantity", "Measurement Validity", "Inter-frequency set update" and "parameters required for each event" (given "report criteria" is set to either "inter-frequency measurement reporting criteria" or "intra-frequency measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "inter-RAT measurement", for any of the optional IEs "Inter-RAT measurement objects list", "Inter-RAT measurement quantity", "Inter-RAT reporting quantity" and "parameters required for each event" (given "report criteria" is set to "inter-RAT measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "UE positioning measurement" and the IE "UE positioning OTDOA assistance data" is present, for any of the optional IEs "UE positioning OTDOA neighbour cell info for UE-assisted", "UE positioning OTDOA reference cell info for UE-assisted", "UE positioning OTDOA neighbour cell info for UE-based" and "UE positioning" that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "UE positioning measurement" and the IE "UE positioning GPS assistance data" is present, for any of the optional IEs "UE positioning GPS reference time", "UE positioning GPS reference UE position", "UE positioning GPS DGPS corrections", "UE positioning GPS navigation model", "UE positioning GPS ionospheric model", "UE positioning GPS ultromodel", "UE positioning GPS almanac", "UE positioning GPS acquisition assistance", "UE positioning GPS real-time integrity" that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "traffic volume measurement", for any of the optional IEs "Traffic volume measurement Object", "Traffic volume measurement quantity", "Traffic volume reporting quantity", "Measurement Validity" and "parameters required for each event" (given "report criteria" is set to "traffic volume measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "quality measurement", for any of the optional IE "Quality reporting quantity" that is present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "UE internal measurement", for any of the optional IEs "UE internal measurement quantity", "UE internal reporting quantity" and "parameters required for each event" (given "report criteria" is set to "UE internal measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 5> replace the corresponding information (the IEs listed above and all their children) stored in variable MEASUREMENT_IDENTITY associated to the identity indicated by the IE "measurement identity" with the one received in the MEASUREMENT CONTROL message;
 - 5> leave all other stored information elements unchanged in the variable MEASUREMENT_IDENTITY.

3> otherwise:

- 4> set the variable CONFIGURATION_INCOMPLETE to TRUE.
- 2> if measurement type is set to "inter-frequency measurement":
 - 3> if "report criteria" is set to "intra-frequency report criteria" and "reporting criteria" in "inter-frequency measurement quantity" is set to "intra-frequency reporting criteria":
 - 4> leave the currently stored "inter-frequency report criteria" within "report criteria" and "inter-frequency reporting criteria" within "inter-frequency measurement quantity" unchanged, and continue to act on the information stored in these variables, and also store the newly received "intra-frequency report criteria" and intra-frequency reporting criteria.

3> otherwise

- 4> clear the variables associated with the CHOICE "report criteria" and store the received "report criteria" choice;
- 4> if the IE "inter-frequency measurement quantity" is present:
 - 5> clear the variables associated with the choice "reporting criteria" in "inter-frequency measurement quantity" and store the received "reporting criteria" choice.
- 2> for measurement types "inter-frequency measurement" that require measurements on a frequency other than the actually used frequency, or that require measurements on another RAT:
 - 3> if, according to its measurement capabilities, the UE requires compressed mode to perform that measurement type and a compressed mode pattern sequence with an appropriate measurement purpose is simultaneously activated by the IE "DPCH compressed mode status info"; and
 - 3> if, according to its measurement capabilities, the UE does not require compressed mode <u>on at least one</u> supported band of that measurement type to perform the measurements:
 - 4> resume the measurements according to the new stored measurement control information.
- 2> for any other measurement type:
 - 3> resume the measurements according to the new stored measurement control information.
- 1> if the IE "measurement command" has the value "release":
 - 2> terminate the measurement associated with the identity given in the IE "measurement identity";
 - 2> clear all stored measurement control information related associated to this measurement identity in variable MEASUREMENT_IDENTITY.
- 1> if the IE "DPCH Compressed Mode Status Info" is present:
 - 2> if, as the result of this message, UE will have more than one transmission gap pattern sequence with the same measurement purpose active (according to IE 'TGMP' in variable TGPS_IDENTITY):
 - 3> set the variable CONFIGURATION_INCOMPLETE to TRUE.
 - 2> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag") in the variable TGPS_IDENTITY):
 - 3> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 4> deactivate this pattern sequence at the beginning of the frame indicated by IE "TGPS reconfiguration CFN" received in the message;
 - 4> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS_IDENTITY to "inactive".
 - 3> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 4> deactivate this pattern sequence at the beginning of the frame indicated by IE "TGPS reconfiguration CFN" received in the message.

- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
 - 2> after the time indicated by IE "TGPS reconfiguration CFN" has elapsed:
 - 3> activate the pattern sequence corresponding to each IE "TGPSI" for which the "TGPS status flag" in this message is set to "activate" at the time indicated by IE "TGCFN"; and
 - 3> set the corresponding "Current TGPS status flag" for this pattern sequence in the variable TGPS_IDENTITY to "active"; and
 - 3> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 3> if the values of IE "TGPS reconfiguration CFN" and IE "TGCFN" are equal:
 - 4> start the concerned pattern sequence immediately at that CFN.
 - 2> not alter pattern sequences stored in variable TGPS_IDENTITY, if the pattern sequence is not identitifed in IE "TGPSI" in the received message.
- 1> if the UE in CELL_FACH state receives a MEASUREMENT CONTROL message, which indicates the same measurement identity as that stored in the variable MEASUREMENT_IDENTITY:
 - 2> update the stored information with the traffic volume measurement control information in variable MEASUREMENT_IDENTITY; and
 - 2> refrain from updating the traffic volume measurement control information associated with this measurement identity in the variable MEASUREMENT_IDENTITY with the information received in System Information Block type 12 (or System Information Block type 11, according to subclause 8.1.1.6.11) until this measurement is explicitly released with another MEASUREMENT CONTROL message.
- 1> if the IE "Read SFN indicator" included in the IE "Cell info" of an inter-frequency cell is set to TRUE and the variable UE_CAPABILITY_TRANSFERRED has the DL "Measurement capability" for "FDD measurements" set to TRUE (the UE requires DL compressed mode in order to perform measurements on FDD):
 - 2> set the variable CONFIGURATION_INCOMPLETE to TRUE.
- 1> clear the entry for the MEASUREMENT CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS;
- 1> if the UE "Additional Measurement List" is present:
 - 2> if the received measurement configuration in this MEASUREMENT CONTROL message, or any measurement identities in the "Additional Measurement List" do not all have the same validity:
 - 3> set the variable CONFIGURATION_INCOMPLETE to TRUE.

The UE may:

- $1\!\!>$ if the IE "Measurement command" has the value "setup":
 - 2> for measurement type "UE positioning measurement":
 - 3> if the UE is CELL_FACH state:
 - 4> if IE "Positioning Method" is set to "GPS":
 - 5> if IE "UE positioning GPS assistance data" is not included and variable UE_POSITIONING_GPS_DATA is empty:
 - 6> if System Information Block types 15, 15.1, 15.2 and 15.3 are broadcast:
 - 7> read System Information Block types 15, 15.1, 15.2 and 15.3.
 - 6> act as specified in subclause 8.6.7.19.3.

Error! No text of specified style in document.

7

1> and the procedure ends.

8.6.6.15 DPCH Compressed mode info

If the IE "DPCH compressed mode info" is included, and if the IE group "transmission gap pattern sequence configuration parameters" is included, the UE shall for each transmission gap pattern sequence perform the following consistency checks:

- 1> if the UE, according to its measurement capabilities, and for all supported bands of the UTRA mode or RAT associated with the measurement purpose indicated by IE "TGMP", requires UL compressed mode for measurements on any of the cells to be measured according to UE variable CELL_INFO_LIST, and CHOICE "UL/DL mode" indicates "DL only":
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if UE, according to its measurement capabilities, and for all supported bands of the UTRA mode or RAT
 associated with the measurement purpose indicated by IE "TGMP", requires DL compressed mode—for
 measurements on any of the cells to be measured according to UE variable CELL_INFO_LIST, and CHOICE
 "UL/DL mode' indicates "UL only':
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the UE, according to its measurement capabilities, does not require UL compressed mode for any of supported band of the UTRA mode or RAT associated with the measurement purpose indicated by the IE "TGMP", and CHOICE 'UL/DL mode' indicates 'UL only' or 'UL and DL':
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the UE, according to its measurement capabilities, does not require DL compressed mode for any supported band of the UTRA mode or RAT associated with the measurement purpose indicated by the IE "TGMP", and CHOICE 'UL/DL mode' indicates 'DL only' or 'UL and DL'
 - 2> set the variable INVALID CONFIGURATION to TRUE.
- 1> if UE already has an active transmission gap pattern sequence that, according to IE "TGMP", has the same measurement purpose, and both patterns will be active after the new configuration has been taken into use:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.

If variable INVALID_CONFIGURATION has value FALSE after UE has performed the checks above, the UE shall:

- 1> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag") in the variable TGPS_IDENTITY):
 - 2> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
 - 2> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- 1> update each pattern sequence to the variable TGPS_IDENTITY according to the IE "TGPSI";

- 1> update into the variable TGPS_IDENTITY the configuration information defined by IE group" transmission gap pattern sequence configuration parameters ";
- 1> after the new configuration has been taken into use:
 - 2> activate the stored pattern sequence corresponding to each IE "TGPSI" for which the "Current TGPS status flag" in the variable TGPS IDENTITY is set to "active" at the time indicated by IE "TGCFN"; and
 - 2> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 2> if the new configuration is taken into use at the same CFN as indicated by IE "TGCFN":
 - 3> start the concerned pattern sequence immediately at that CFN.
- 1> monitor if the parallel transmission gap pattern sequences create an illegal overlap, and in case of overlap, take actions as specified in subclause 8.2.11.2.

If the IE "DPCH compressed mode info" is included, and if the IE group "transmission gap pattern sequence configuration parameters" is not included, the UE shall:

- 1> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag" in the variable TGPS_IDENTITY):
 - 2> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use;
 - 3> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS_IDENTITY to "inactive".
 - 2> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- 1> after the new configuration has been taken into use:
 - 2> 2> activate, at the time indicated by IE "TGCFN",
 - 3> the stored pattern sequence corresponding to each IE "TGPSI" for which the "TGPS status flag" is set to "activate"; and
 - 3> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS IDENTITY to 'active';
 - 2> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 2> if the new configuration is taken into use at the same CFN as indicated by IE "TGCFN":
 - 3> start the concerned pattern sequence immediately at that CFN.

For transmission gap pattern sequences stored in variable TGPS_IDENTITY, but not identified in IE "TGPSI", the UE shall:

- 1> if the received message implies a timing re-initialised hard handover (see subclause 8.3.5.1):
 - 2> deactivate such transmission gap pattern sequences at the beginning of the frame, indicated by IE "Activation time" (see subclause 8.6.3.1) received in this message; and
 - 2> set IE "Current TGPS Status Flag" in corresponding UE variable TGPS_IDENTITY to 'inactive'.

- 1> if the received message not implies a timing re-initialised hard handover (see subclause 8.3.5.1):
 - 2> continue such transmission gap pattern sequence according to IE "Current TGPS Status Flag" in the corresponding UE variable TGPS_IDENTITY.

Uplink and downlink compressed mode methods are described in [27]. For UL "higher layer scheduling" compressed mode method and transport format combination selection, see [15].

 \mathfrak{R}

3GPP TSG-RAN WG2 Meeting #33 Sophia Antipolis, France, 12-15 November 2002

Tdoc # R2-023251

CR-Form-v7 CHANGE REQUEST Current version: 25.331 CR 1778 # rev

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the \$\mathbb{X}\$ symbols.

Proposed chang	ge a	affects:	UICC apps 	ME X Radio Ac	cess Netwo	rk X Core Network
Title:	ж	Correct	tion on support for com	pressed mode		
Source:	\mathfrak{R}	Mitsubi	shi Electric (METE-RD), Motorola, Nortel, S	Siemens	
Work item code	<i>:</i> Ж	TEI			Date:	15/11/2002
Category:	\mathfrak{R}				Release: ₩	
			of the following categorie	es:		the following releases:
			correction)		2	(GSM Phase 2)
		•	corresponds to a correction	on in an earlier release,		(Release 1996)
		B (a	addition of feature),		R97	(Release 1997)
		- 1	functional modification of	feature)	R98	(Release 1998)
		D (6	editorial modification)		R99	(Release 1999)
			explanations of the above	e categories can	Rel-4	(Release 4)
		be found	in 3GPP <u>TR 21.900</u> .		Rel-5	(Release 5)
					Rel-6	(Release 6)

Reason for change: # 1)

- It is unclear whether the UE shall support compressed mode when it does not need it. A widely spread misunderstanding was that support for compressed was not mandated when compressed mode is not needed.
- The current "DPCH Compressed mode info" consistency check procedure is using the CELL_INFO_LIST which may be not available or complete at the time of compressed mode configuration
- 3) The IE "Current TGPS Status Flag" is not updated after an activation of the corresponding TGPS

- Summary of change: \$\mathbb{X} 1) UE shall reject a compressed mode configuration when it does not need compressed mode for any supported band of the RAT or UTRA mode related to the measurement and a direction for which the CM pattern is configured
 - UE shall reject a compressed mode configuration when it needs compressed mode for all supported band of the RAT or UTRA mode related to the measurement and a direction, and the configured CM pattern does not provide that direction.
 - 2) Reference to CELL INFO LIST is removed from the "DPCH Compressed mode info" consistency check procedure, and check procedure is based only on UE measurement capability and on transmission gap measurement purpose.
 - 3) 8.6.6.15: The IE "Current TGPS Status Flag" is set to "active"

Isolated Impact Analysis

Functionality corrected: Compressed mode meaurements on inter-frequency and inter-RAT cells.

Isolated impact statement: Correction to a function where specification was missing

procedural text. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.

Consequences if not approved:

1&2)If the CR is not approved it will not be clear from the RRC specification that the UE is not required to support compressed mode for the cases that it signals in its UE capabilities that it does not need compressed mode for any band of the same RAT or UTRA mode. If the network were to attempt to activate compressed mode for a case that it is not supported by the UE then the inter-frequency or inter-RAT measurements will fail.

Also it will not be completely clear under which conditions the UE is permitted to reject a compressed mode configuration. If the UE were to reject a configuration that it should be accept then the inter-frequencies or inter-RAT measurements would fail.

3) Section 8.6.6.15 is not aligned with section 8.4.1.3. Unexpected UE behaviour for compressed may result from this when implementation follows incorrect 8.6.6.15.

Clauses affected:	8.4.1.3 , 8.6.6.15		
Other specs affected:	Y N X Other core specifications Test specifications O&M Specifications		
Other comments:	x		

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked \(\mathcal{H} \) contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.4.1.3 Reception of MEASUREMENT CONTROL by the UE

Upon reception of a MEASUREMENT CONTROL message the UE shall perform actions specified in subclause 8.6 unless otherwise specified below.

The UE shall:

- 1> read the IE "Measurement command";
- 1> if the IE "Measurement command" has the value "setup":
 - 2> store this measurement in the variable MEASUREMENT_IDENTITY according to the IE "measurement identity", first releasing any previously stored measurement with that identity if that exists;
 - 2> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
 - 3> if the UE is in CELL_FACH state:
 - 4> the UE behaviour is not specified.
 - 2> for measurement types "inter-RAT measurement" or "inter-frequency measurement":
 - 3> if, according to its measurement capabilities, the UE requires compressed mode to perform that measurement type and a compressed mode pattern sequence with an appropriate measurement purpose is simultaneously activated by the IE "DPCH compressed mode status info"; or
 - 3> if, according to its measurement capabilities, the UE does not require compressed mode to perform the measurements on at least one supported band of that measurement type:
 - 4> if the measurement is valid in the current RRC state of the UE:
 - 5> begin measurements according to the stored control information for this measurement identity.
 - NOTE: The UE is not required to perform measurements on cells for which it needs compressed mode but a suitable compressed mode pattern is not activated.
 - 2> for measurement type "UE positioning measurement":
 - 3> if the UE is in CELL_FACH state:
 - 4> if IE "Positioning Method" is set to "OTDOA":
 - 5> if IE "Method Type" is set to "UE assisted":
 - 6> if IE "UE positioning OTDOA assistance data for UE assisted" is not included:
 - 7> if System Information Block type 15.4 is broadcast:
 - 8> read System Information Block type 15.4.
 - 7> act as specified in subclause 8.6.7.19.2.
 - 5> if IE "Method Type" is set to "UE based":
 - 6> if IE "UE positioning OTDOA assistance data for UE based" is not included:
 - 7> if System Information Block type 15.5 is broadcast:
 - 8> read System Information Block type 15.5.
 - 7> act as specified in subclause 8.6.7.19.2a.
 - 2> for any other measurement type:
 - 3> if the measurement is valid in the current RRC state of the UE:
 - 4> begin measurements according to the stored control information for this measurement identity.

- 1> if the IE "Measurement command" has the value "modify":
 - 2> for all IEs present in the MEASUREMENT CONTROL message:
 - 3> if a measurement was stored in the variable MEASUREMENT_IDENTITY associated to the identity by the IE "measurement identity":
 - 4> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
 - 5> if the UE is in CELL_FACH state:
 - 6> the UE behaviour is not specified.
 - 4> if measurement type is set to "intra-frequency measurement", for any of the optional IEs "Intra-frequency measurement objects list", "Intra-frequency measurement quantity", "Intra-frequency reporting quantity", "Measurement Validity", "report criteria" and "parameters required for each event" (given "report criteria" is set to "intra-frequency measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "inter-frequency measurement", for any of the optional IEs "Inter-frequency measurement quantity", "Inter-frequency reporting quantity", "Measurement Validity", "Inter-frequency set update" and "parameters required for each event" (given "report criteria" is set to either "inter-frequency measurement reporting criteria" or "intra-frequency measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "inter-RAT measurement", for any of the optional IEs "Inter-RAT measurement objects list", "Inter-RAT measurement quantity", "Inter-RAT reporting quantity" and "parameters required for each event" (given "report criteria" is set to "inter-RAT measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "UE positioning measurement" and the IE "UE positioning OTDOA assistance data" is present, for any of the optional IEs "UE positioning OTDOA neighbour cell info for UE-assisted", "UE positioning OTDOA reference cell info for UE-assisted", "UE positioning OTDOA neighbour cell info for UE-based", "UE positioning OTDOA neighbour cell info for UE-based" and "UE positioning" that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "UE positioning measurement" and the IE "UE positioning GPS assistance data" is present, for any of the optional IEs "UE positioning GPS reference time", "UE positioning GPS reference UE position", "UE positioning GPS DGPS corrections", "UE positioning GPS navigation model", "UE positioning GPS ionospheric model", "UE positioning GPS ultromodel", "UE positioning GPS almanac", "UE positioning GPS acquisition assistance", "UE positioning GPS real-time integrity" that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "traffic volume measurement", for any of the optional IEs "Traffic volume measurement Object", "Traffic volume measurement quantity", "Traffic volume reporting quantity", "Measurement Validity" and "parameters required for each event" (given "report criteria" is set to "traffic volume measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "quality measurement", for any of the optional IE "Quality reporting quantity" that is present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "UE internal measurement", for any of the optional IEs "UE internal measurement quantity", "UE internal reporting quantity" and "parameters required for each event" (given "report criteria" is set to "UE internal measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 5> replace the corresponding information (the IEs listed above and all their children) stored in variable MEASUREMENT_IDENTITY associated to the identity indicated by the IE "measurement identity" with the one received in the MEASUREMENT CONTROL message;
 - 5> leave all other stored information elements unchanged in the variable MEASUREMENT_IDENTITY.

3> otherwise:

- 4> set the variable CONFIGURATION_INCOMPLETE to TRUE.
- 2> if measurement type is set to "inter-frequency measurement":
 - 3> if "report criteria" is set to "intra-frequency report criteria" and "reporting criteria" in "inter-frequency measurement quantity" is set to "intra-frequency reporting criteria":
 - 4> leave the currently stored "inter-frequency report criteria" within "report criteria" and "inter-frequency reporting criteria" within "inter-frequency measurement quantity" unchanged, and continue to act on the information stored in these variables, and also store the newly received "intra-frequency report criteria" and intra-frequency reporting criteria.

3> otherwise

- 4> clear the variables associated with the CHOICE "report criteria" and store the received "report criteria" choice;
- 4> if the IE "inter-frequency measurement quantity" is present:
 - 5> clear the variables associated with the choice "reporting criteria" in "inter-frequency measurement quantity" and store the received "reporting criteria" choice.
- 2> for measurement types "inter-frequency measurement" that require measurements on a frequency other than the actually used frequency, or that require measurements on another RAT:
 - 3> if, according to its measurement capabilities, the UE requires compressed mode to perform that measurement type and a compressed mode pattern sequence with an appropriate measurement purpose is simultaneously activated by the IE "DPCH compressed mode status info"; and
 - 3> if, according to its measurement capabilities, the UE does not require compressed mode <u>on at least one</u> supported band of that measurement type to perform the measurements:
 - 4> resume the measurements according to the new stored measurement control information.
- 2> for any other measurement type:
 - 3> resume the measurements according to the new stored measurement control information.
- 1> if the IE "measurement command" has the value "release":
 - 2> terminate the measurement associated with the identity given in the IE "measurement identity";
 - 2> clear all stored measurement control information related associated to this measurement identity in variable MEASUREMENT_IDENTITY.
- 1> if the IE "DPCH Compressed Mode Status Info" is present:
 - 2> if, as the result of this message, UE will have more than one transmission gap pattern sequence with the same measurement purpose active (according to IE 'TGMP' in variable TGPS_IDENTITY):
 - 3> set the variable CONFIGURATION_INCOMPLETE to TRUE.
 - 2> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag") in the variable TGPS_IDENTITY):
 - 3> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 4> deactivate this pattern sequence at the beginning of the frame indicated by IE "TGPS reconfiguration CFN" received in the message;
 - 4> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS_IDENTITY to "inactive".
 - 3> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 4> deactivate this pattern sequence at the beginning of the frame indicated by IE "TGPS reconfiguration CFN" received in the message.

- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
 - 2> after the time indicated by IE "TGPS reconfiguration CFN" has elapsed:
 - 3> activate the pattern sequence corresponding to each IE "TGPSI" for which the "TGPS status flag" in this message is set to "activate" at the time indicated by IE "TGCFN"; and
 - 3> set the corresponding "Current TGPS status flag" for this pattern sequence in the variable TGPS_IDENTITY to "active"; and
 - 3> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 3> if the values of IE "TGPS reconfiguration CFN" and IE "TGCFN" are equal:
 - 4> start the concerned pattern sequence immediately at that CFN.
 - 2> not alter pattern sequences stored in variable TGPS_IDENTITY, if the pattern sequence is not identitifed in IE "TGPSI" in the received message.
- 1> if the UE in CELL_FACH state receives a MEASUREMENT CONTROL message, which indicates the same measurement identity as that stored in the variable MEASUREMENT_IDENTITY:
 - 2> update the stored information with the traffic volume measurement control information in variable MEASUREMENT_IDENTITY; and
 - 2> refrain from updating the traffic volume measurement control information associated with this measurement identity in the variable MEASUREMENT_IDENTITY with the information received in System Information Block type 12 (or System Information Block type 11, according to subclause 8.1.1.6.11) until this measurement is explicitly released with another MEASUREMENT CONTROL message.
- 1> if the IE "Read SFN indicator" included in the IE "Cell info" of an inter-frequency cell is set to TRUE and the variable UE_CAPABILITY_TRANSFERRED has the DL "Measurement capability" for "FDD measurements" set to TRUE (the UE requires DL compressed mode in order to perform measurements on FDD):
 - 2> set the variable CONFIGURATION_INCOMPLETE to TRUE.
- 1> clear the entry for the MEASUREMENT CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS;
- 1> if the UE "Additional Measurement List" is present:
 - 2> if the received measurement configuration in this MEASUREMENT CONTROL message, or any measurement identities in the "Additional Measurement List" do not all have the same validity:
 - 3> set the variable CONFIGURATION_INCOMPLETE to TRUE.

The UE may:

- 1> if the IE "Measurement command" has the value "setup":
 - 2> for measurement type "UE positioning measurement":
 - 3> if the UE is CELL_FACH state:
 - 4> if IE "Positioning Method" is set to "GPS":
 - 5> if IE "UE positioning GPS assistance data" is not included and variable UE_POSITIONING_GPS_DATA is empty:
 - 6> if System Information Block types 15, 15.1, 15.2 and 15.3 are broadcast:
 - 7> read System Information Block types 15, 15.1, 15.2 and 15.3.
 - 6> act as specified in subclause 8.6.7.19.3.

Error! No text of specified style in document.

7

1> and the procedure ends.

8.6.6.15 DPCH Compressed mode info

If the IE "DPCH compressed mode info" is included, and if the IE group "transmission gap pattern sequence configuration parameters" is included, the UE shall for each transmission gap pattern sequence perform the following consistency checks:

- 1> if the UE, according to its measurement capabilities, and for all supported bands of the UTRA mode or RAT associated with the measurement purpose indicated by IE "TGMP", requires UL compressed mode for measurements on any of the cells to be measured according to UE variable CELL_INFO_LIST, and CHOICE "UL/DL mode" indicates "DL only":
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if UE, according to its measurement capabilities, and for all supported bands of the UTRA mode or RAT
 associated with the measurement purpose indicated by IE "TGMP", requires DL compressed mode—for
 measurements on any of the cells to be measured according to UE variable CELL_INFO_LIST, and CHOICE
 "UL/DL mode' indicates "UL only':
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the UE, according to its measurement capabilities, does not require UL compressed mode for any of supported band of the UTRA mode or RAT associated with the measurement purpose indicated by the IE "TGMP", and CHOICE 'UL/DL mode' indicates 'UL only' or 'UL and DL':
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the UE, according to its measurement capabilities, does not require DL compressed mode for any supported band of the UTRA mode or RAT associated with the measurement purpose indicated by the IE "TGMP", and CHOICE 'UL/DL mode' indicates 'DL only' or 'UL and DL'
 - 2> set the variable INVALID CONFIGURATION to TRUE.
- 1> if UE already has an active transmission gap pattern sequence that, according to IE "TGMP", has the same measurement purpose, and both patterns will be active after the new configuration has been taken into use:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.

If variable INVALID_CONFIGURATION has value FALSE after UE has performed the checks above, the UE shall:

- 1> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag") in the variable TGPS_IDENTITY):
 - 2> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
 - 2> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- 1> update each pattern sequence to the variable TGPS IDENTITY according to the IE "TGPSI";

- 1> update into the variable TGPS_IDENTITY the configuration information defined by IE group" transmission gap pattern sequence configuration parameters ";
- 1> after the new configuration has been taken into use:
 - 2> activate the stored pattern sequence corresponding to each IE "TGPSI" for which the "Current TGPS status flag" in the variable TGPS_IDENTITY is set to "active" at the time indicated by IE "TGCFN"; and
 - 2> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 2> if the new configuration is taken into use at the same CFN as indicated by IE "TGCFN":
 - 3> start the concerned pattern sequence immediately at that CFN.
- 1> monitor if the parallel transmission gap pattern sequences create an illegal overlap, and in case of overlap, take actions as specified in subclause 8.2.11.2.

If the IE "DPCH compressed mode info" is included, and if the IE group "transmission gap pattern sequence configuration parameters" is not included, the UE shall:

- 1> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag" in the variable TGPS_IDENTITY):
 - 2> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use:
 - 3> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS_IDENTITY to "inactive".
 - 2> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- 1> after the new configuration has been taken into use:
 - 2> 2> activate, at the time indicated by IE "TGCFN",
 - 3> the stored pattern sequence corresponding to each IE "TGPSI" for which the "TGPS status flag" is set to "activate"; and
 - 3> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS IDENTITY to 'active';
 - 2> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 2> if the new configuration is taken into use at the same CFN as indicated by IE "TGCFN":
 - 3> start the concerned pattern sequence immediately at that CFN.

For transmission gap pattern sequences stored in variable TGPS_IDENTITY, but not identified in IE "TGPSI", the UE shall:

- 1> if the received message implies a timing re-initialised hard handover (see subclause 8.3.5.1):
 - 2> deactivate such transmission gap pattern sequences at the beginning of the frame, indicated by IE "Activation time" (see subclause 8.6.3.1) received in this message; and
 - 2> set IE "Current TGPS Status Flag" in corresponding UE variable TGPS_IDENTITY to 'inactive'.

- 1> if the received message not implies a timing re-initialised hard handover (see subclause 8.3.5.1):
 - 2> continue such transmission gap pattern sequence according to IE "Current TGPS Status Flag" in the corresponding UE variable TGPS_IDENTITY.

Uplink and downlink compressed mode methods are described in [27]. For UL "higher layer scheduling" compressed mode method and transport format combination selection, see [15].

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3GPP TSG-RAN WG2 Meeting #33 Sophia Antipolis, France, 12-15 November 2002

Tdoc # R2-023252

For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the # symbols.

Proposed chang	ge a	affects: UICC apps策 ME [)	<mark>▼</mark> Radio Acc	ess Networ	k X Core Network	
Title:	ж	Correction on support for compressed	mode			
Source:	\mathfrak{R}	Mitsubishi Electric (METE-RD), Motorola, Nortel, Siemens				
		· ·				
Work item code.	: Ж	TEI		Date: ♯	15/11/2002	
Category:	\mathfrak{R}	A	R	Release: #	Rel-5	
		Use <u>one</u> of the following categories:		Use <u>one</u> of	the following releases:	
		F (correction)		2	(GSM Phase 2)	
		A (corresponds to a correction in an ea	arlier release)	R96	(Release 1996)	
		B (addition of feature),		R97	(Release 1997)	
		C (functional modification of feature)		R98	(Release 1998)	
		D (editorial modification)		R99	(Release 1999)	
		Detailed explanations of the above categorie	es can	Rel-4	(Release 4)	
		be found in 3GPP TR 21.900.		Rel-5	(Release 5)	

Reason for change: # 1)

It is unclear whether the UE shall support compressed mode when it does not need it.
 A widely spread misunderstanding was that support for compressed was not mandated when compressed mode is not needed.

Rel-6

(Release 6)

- 2) The current "DPCH Compressed mode info" consistency check procedure is using the CELL_INFO_LIST which may be not available or complete at the time of compressed mode configuration
- 3) The IE "Current TGPS Status Flag" is not updated after an activation of the corresponding TGPS

- UE shall reject a compressed mode configuration when it does not need compressed mode for any supported band of the RAT or UTRA mode related to the measurement and a direction for which the CM pattern is configured
 - UE shall reject a compressed mode configuration when it needs compressed mode for all supported band of the RAT or UTRA mode related to the measurement and a direction, and the configured CM pattern does not provide that direction.
- Reference to CELL_INFO_LIST is removed from the "DPCH Compressed mode info" consistency check procedure, and check procedure is based only on UE measurement capability and on transmission gap measurement purpose.
- 3) 8.6.6.15: The IE "Current TGPS Status Flag" is set to "active"

Isolated Impact Analysis

Functionality corrected: Compressed mode meaurements on inter-frequency and inter-RAT cells.

Isolated impact statement: Correction to a function where specification was missing

procedural text. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.

Consequences if not approved:

1&2)If the CR is not approved it will not be clear from the RRC specification that the UE is not required to support compressed mode for the cases that it signals in its UE capabilities that it does not need compressed mode for any band of the same RAT or UTRA mode. If the network were to attempt to activate compressed mode for a case that it is not supported by the UE then the inter-frequency or inter-RAT measurements will fail.

Also it will not be completely clear under which conditions the UE is permitted to reject a compressed mode configuration. If the UE were to reject a configuration that it should be accept then the inter-frequencies or inter-RAT measurements would fail.

3) Section 8.6.6.15 is not aligned with section 8.4.1.3. Unexpected UE behaviour for compressed may result from this when implementation follows incorrect 8.6.6.15.

Clauses affected:	第 8.4.1.3, 8.6.6.15
Other specs affected:	Y N X Other core specifications Test specifications O&M Specifications
Other comments:	x

How to create CRs using this form:

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- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.4.1.3 Reception of MEASUREMENT CONTROL by the UE

Upon reception of a MEASUREMENT CONTROL message the UE shall perform actions specified in subclause 8.6 unless otherwise specified below.

The UE shall:

- 1> read the IE "Measurement command";
- 1> if the IE "Measurement command" has the value "setup":
 - 2> store this measurement in the variable MEASUREMENT_IDENTITY according to the IE "measurement identity", first releasing any previously stored measurement with that identity if that exists;
 - 2> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
 - 3> if the UE is in CELL_FACH state:
 - 4> the UE behaviour is not specified.
 - 2> for measurement types "inter-RAT measurement" or "inter-frequency measurement":
 - 3> if, according to its measurement capabilities, the UE requires compressed mode to perform that measurement type and a compressed mode pattern sequence with an appropriate measurement purpose is simultaneously activated by the IE "DPCH compressed mode status info"; or
 - 3> if, according to its measurement capabilities, the UE does not require compressed mode to perform the measurements on at least one supported band of that measurement type:
 - 4> if the measurement is valid in the current RRC state of the UE:
 - 5> begin measurements according to the stored control information for this measurement identity.
 - NOTE: The UE is not required to perform measurements on cells for which it needs compressed mode but a suitable compressed mode pattern is not activated.
 - 2> for measurement type "UE positioning measurement":
 - 3> if the UE is in CELL_FACH state:
 - 4> if IE "Positioning Method" is set to "OTDOA":
 - 5> if IE "Method Type" is set to "UE assisted":
 - 6> if IE "UE positioning OTDOA assistance data for UE assisted" is not included:
 - 7> if System Information Block type 15.4 is broadcast:
 - 8> read System Information Block type 15.4.
 - 7> act as specified in subclause 8.6.7.19.2.
 - 5> if IE "Method Type" is set to "UE based":
 - 6> if IE "UE positioning OTDOA assistance data for UE based" is not included:
 - 7> if System Information Block type 15.5 is broadcast:
 - 8> read System Information Block type 15.5.
 - 7> act as specified in subclause 8.6.7.19.2a.
 - 2> for any other measurement type:
 - 3> if the measurement is valid in the current RRC state of the UE:
 - 4> begin measurements according to the stored control information for this measurement identity.

- 1> if the IE "Measurement command" has the value "modify":
 - 2> for all IEs present in the MEASUREMENT CONTROL message:
 - 3> if a measurement was stored in the variable MEASUREMENT_IDENTITY associated to the identity by the IE "measurement identity":
 - 4> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
 - 5> if the UE is in CELL_FACH state:
 - 6> the UE behaviour is not specified.
 - 4> if measurement type is set to "intra-frequency measurement", for any of the optional IEs "Intra-frequency measurement objects list", "Intra-frequency measurement quantity", "Intra-frequency reporting quantity", "Measurement Validity", "report criteria" and "parameters required for each event" (given "report criteria" is set to "intra-frequency measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "inter-frequency measurement", for any of the optional IEs "Inter-frequency measurement quantity", "Inter-frequency reporting quantity", "Measurement Validity", "Inter-frequency set update" and "parameters required for each event" (given "report criteria" is set to either "inter-frequency measurement reporting criteria" or "intra-frequency measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "inter-RAT measurement", for any of the optional IEs "Inter-RAT measurement objects list", "Inter-RAT measurement quantity", "Inter-RAT reporting quantity" and "parameters required for each event" (given "report criteria" is set to "inter-RAT measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "UE positioning measurement" and the IE "UE positioning OTDOA assistance data" is present, for any of the optional IEs "UE positioning OTDOA neighbour cell info for UE-assisted", "UE positioning OTDOA reference cell info for UE-assisted", "UE positioning OTDOA neighbour cell info for UE-based", "UE positioning OTDOA neighbour cell info for UE-based" and "UE positioning" that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "UE positioning measurement" and the IE "UE positioning GPS assistance data" is present, for any of the optional IEs "UE positioning GPS reference time", "UE positioning GPS reference UE position", "UE positioning GPS DGPS corrections", "UE positioning GPS navigation model", "UE positioning GPS ionospheric model", "UE positioning GPS ultromodel", "UE positioning GPS almanac", "UE positioning GPS acquisition assistance", "UE positioning GPS real-time integrity" that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "traffic volume measurement", for any of the optional IEs "Traffic volume measurement Object", "Traffic volume measurement quantity", "Traffic volume reporting quantity", "Measurement Validity" and "parameters required for each event" (given "report criteria" is set to "traffic volume measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "quality measurement", for any of the optional IE "Quality reporting quantity" that is present in the MEASUREMENT CONTROL message:
 - 4> if measurement type is set to "UE internal measurement", for any of the optional IEs "UE internal measurement quantity", "UE internal reporting quantity" and "parameters required for each event" (given "report criteria" is set to "UE internal measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
 - 5> replace the corresponding information (the IEs listed above and all their children) stored in variable MEASUREMENT_IDENTITY associated to the identity indicated by the IE "measurement identity" with the one received in the MEASUREMENT CONTROL message;
 - 5> leave all other stored information elements unchanged in the variable MEASUREMENT_IDENTITY.

3> otherwise:

- 4> set the variable CONFIGURATION_INCOMPLETE to TRUE.
- 2> if measurement type is set to "inter-frequency measurement":
 - 3> if "report criteria" is set to "intra-frequency report criteria" and "reporting criteria" in "inter-frequency measurement quantity" is set to "intra-frequency reporting criteria":
 - 4> leave the currently stored "inter-frequency report criteria" within "report criteria" and "inter-frequency reporting criteria" within "inter-frequency measurement quantity" unchanged, and continue to act on the information stored in these variables, and also store the newly received "intra-frequency report criteria" and intra-frequency reporting criteria.

3> otherwise

- 4> clear the variables associated with the CHOICE "report criteria" and store the received "report criteria" choice;
- 4> if the IE "inter-frequency measurement quantity" is present:
 - 5> clear the variables associated with the choice "reporting criteria" in "inter-frequency measurement quantity" and store the received "reporting criteria" choice.
- 2> for measurement types "inter-frequency measurement" that require measurements on a frequency other than the actually used frequency, or that require measurements on another RAT:
 - 3> if, according to its measurement capabilities, the UE requires compressed mode to perform that measurement type and a compressed mode pattern sequence with an appropriate measurement purpose is simultaneously activated by the IE "DPCH compressed mode status info"; and
 - 3> if, according to its measurement capabilities, the UE does not require compressed mode <u>on at least one</u> supported band of that measurement type to perform the measurements:
 - 4> resume the measurements according to the new stored measurement control information.
- 2> for any other measurement type:
 - 3> resume the measurements according to the new stored measurement control information.
- 1> if the IE "measurement command" has the value "release":
 - 2> terminate the measurement associated with the identity given in the IE "measurement identity";
 - 2> clear all stored measurement control information related associated to this measurement identity in variable MEASUREMENT_IDENTITY.
- 1> if the IE "DPCH Compressed Mode Status Info" is present:
 - 2> if, as the result of this message, UE will have more than one transmission gap pattern sequence with the same measurement purpose active (according to IE 'TGMP' in variable TGPS_IDENTITY):
 - 3> set the variable CONFIGURATION_INCOMPLETE to TRUE.
 - 2> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag") in the variable TGPS_IDENTITY):
 - 3> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 4> deactivate this pattern sequence at the beginning of the frame indicated by IE "TGPS reconfiguration CFN" received in the message;
 - 4> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS_IDENTITY to "inactive".
 - 3> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 4> deactivate this pattern sequence at the beginning of the frame indicated by IE "TGPS reconfiguration CFN" received in the message.

- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
 - 2> after the time indicated by IE "TGPS reconfiguration CFN" has elapsed:
 - 3> activate the pattern sequence corresponding to each IE "TGPSI" for which the "TGPS status flag" in this message is set to "activate" at the time indicated by IE "TGCFN"; and
 - 3> set the corresponding "Current TGPS status flag" for this pattern sequence in the variable TGPS_IDENTITY to "active"; and
 - 3> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 3> if the values of IE "TGPS reconfiguration CFN" and IE "TGCFN" are equal:
 - 4> start the concerned pattern sequence immediately at that CFN.
 - 2> not alter pattern sequences stored in variable TGPS_IDENTITY, if the pattern sequence is not identitifed in IE "TGPSI" in the received message.
- 1> if the UE in CELL_FACH state receives a MEASUREMENT CONTROL message, which indicates the same measurement identity as that stored in the variable MEASUREMENT_IDENTITY:
 - 2> update the stored information with the traffic volume measurement control information in variable MEASUREMENT_IDENTITY; and
 - 2> refrain from updating the traffic volume measurement control information associated with this measurement identity in the variable MEASUREMENT_IDENTITY with the information received in System Information Block type 12 (or System Information Block type 11, according to subclause 8.1.1.6.11) until this measurement is explicitly released with another MEASUREMENT CONTROL message.
- 1> if the IE "Read SFN indicator" included in the IE "Cell info" of an inter-frequency cell is set to TRUE and the variable UE_CAPABILITY_TRANSFERRED has the DL "Measurement capability" for "FDD measurements" set to TRUE (the UE requires DL compressed mode in order to perform measurements on FDD):
 - 2> set the variable CONFIGURATION_INCOMPLETE to TRUE.
- 1> clear the entry for the MEASUREMENT CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS;
- 1> if the UE "Additional Measurement List" is present:
 - 2> if the received measurement configuration in this MEASUREMENT CONTROL message, or any measurement identities in the "Additional Measurement List" do not all have the same validity:
 - 3> set the variable CONFIGURATION_INCOMPLETE to TRUE.

The UE may:

- $1\!\!>$ if the IE "Measurement command" has the value "setup":
 - 2> for measurement type "UE positioning measurement":
 - 3> if the UE is CELL_FACH state:
 - 4> if IE "Positioning Method" is set to "GPS":
 - 5> if IE "UE positioning GPS assistance data" is not included and variable UE_POSITIONING_GPS_DATA is empty:
 - 6> if System Information Block types 15, 15.1, 15.2 and 15.3 are broadcast:
 - 7> read System Information Block types 15, 15.1, 15.2 and 15.3.
 - 6> act as specified in subclause 8.6.7.19.3.

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1> and the procedure ends.

8.6.6.15 DPCH Compressed mode info

If the IE "DPCH compressed mode info" is included, and if the IE group "transmission gap pattern sequence configuration parameters" is included, the UE shall for each transmission gap pattern sequence perform the following consistency checks:

- 1> if the UE, according to its measurement capabilities, and for all supported bands of the UTRA mode or RAT associated with the measurement purpose indicated by IE "TGMP", requires UL compressed mode for measurements on any of the cells to be measured according to UE variable CELL_INFO_LIST, and CHOICE "UL/DL mode" indicates "DL only":
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if UE, according to its measurement capabilities, and for all supported bands of the UTRA mode or RAT
 associated with the measurement purpose indicated by IE "TGMP", requires DL compressed mode—for
 measurements on any of the cells to be measured according to UE variable CELL_INFO_LIST, and CHOICE
 "UL/DL mode' indicates "UL only':
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the UE, according to its measurement capabilities, does not require UL compressed mode for any of supported band of the UTRA mode or RAT associated with the measurement purpose indicated by the IE "TGMP", and CHOICE 'UL/DL mode' indicates 'UL only' or 'UL and DL':
 - 2> set the variable INVALID_CONFIGURATION to TRUE.
- 1> if the UE, according to its measurement capabilities, does not require DL compressed mode for any supported band of the UTRA mode or RAT associated with the measurement purpose indicated by the IE "TGMP", and CHOICE 'UL/DL mode' indicates 'DL only' or 'UL and DL'
 - 2> set the variable INVALID CONFIGURATION to TRUE.
- 1> if UE already has an active transmission gap pattern sequence that, according to IE "TGMP", has the same measurement purpose, and both patterns will be active after the new configuration has been taken into use:
 - 2> set the variable INVALID_CONFIGURATION to TRUE.

If variable INVALID_CONFIGURATION has value FALSE after UE has performed the checks above, the UE shall:

- 1> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag") in the variable TGPS_IDENTITY):
 - 2> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
 - 2> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- 1> update each pattern sequence to the variable TGPS IDENTITY according to the IE "TGPSI";

- 1> update into the variable TGPS_IDENTITY the configuration information defined by IE group" transmission gap pattern sequence configuration parameters ";
- 1> after the new configuration has been taken into use:
 - 2> activate the stored pattern sequence corresponding to each IE "TGPSI" for which the "Current TGPS status flag" in the variable TGPS_IDENTITY is set to "active" at the time indicated by IE "TGCFN"; and
 - 2> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 2> if the new configuration is taken into use at the same CFN as indicated by IE "TGCFN":
 - 3> start the concerned pattern sequence immediately at that CFN.
- 1> monitor if the parallel transmission gap pattern sequences create an illegal overlap, and in case of overlap, take actions as specified in subclause 8.2.11.2.

If the IE "DPCH compressed mode info" is included, and if the IE group "transmission gap pattern sequence configuration parameters" is not included, the UE shall:

- 1> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag" in the variable TGPS_IDENTITY):
 - 2> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use:
 - 3> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS_IDENTITY to "inactive".
 - 2> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
 - 3> deactivate this pattern sequence at the beginning of the frame, indicated by IE "Activation time"(see subclause 8.6.3.1) received in this message, when the new configuration received in this message is taken into use.
- NOTE: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- 1> after the new configuration has been taken into use:
 - 2> 2> activate, at the time indicated by IE "TGCFN",
 - 3> the stored pattern sequence corresponding to each IE "TGPSI" for which the "TGPS status flag" is set to "activate"; and
 - 3> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS IDENTITY to 'active';
 - 2> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - 2> if the new configuration is taken into use at the same CFN as indicated by IE "TGCFN":
 - 3> start the concerned pattern sequence immediately at that CFN.

For transmission gap pattern sequences stored in variable TGPS_IDENTITY, but not identified in IE "TGPSI", the UE shall:

- 1> if the received message implies a timing re-initialised hard handover (see subclause 8.3.5.1):
 - 2> deactivate such transmission gap pattern sequences at the beginning of the frame, indicated by IE "Activation time" (see subclause 8.6.3.1) received in this message; and
 - 2> set IE "Current TGPS Status Flag" in corresponding UE variable TGPS_IDENTITY to 'inactive'.

- 1> if the received message not implies a timing re-initialised hard handover (see subclause 8.3.5.1):
 - 2> continue such transmission gap pattern sequence according to IE "Current TGPS Status Flag" in the corresponding UE variable TGPS_IDENTITY.

Uplink and downlink compressed mode methods are described in [27]. For UL "higher layer scheduling" compressed mode method and transport format combination selection, see [15].